

Analytical Data Package Prepared For

Pacific Northwest National Lab

Radiochemical Analysis By

STL Richland STLRL

2800 G.W. Way, Richland Wa, 99354, (509)-375-3131.

Data Package Contains Pages

Report Nbr: 34821

SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05121	W07-002	B1M870	J7B120175-1	JPAPP1AA	9JPAPP10	7050420
		B1M870	J7B120175-1	JPAPP1AC	9JPAPP10	7050408
		B1M870	J7B120175-1	JPAPP1AD	9JPAPP10	7050402
		B1M902	J7B120175-2	JPAPR1AA	9JPAPR10	7050417
		B1M902	J7B120175-2	JPAPR1AC	9JPAPR10	7050408
		B1M907	J7B120175-3	JPAP21AA	9JPAP210	7050417
		B1M907	J7B120175-3	JPAP21AC	9JPAP210	7050408
		B1M906	J7B120175-4	JPAP51AA	9JPAP510	7050417
		B1M906	J7B120175-4	JPAP51AC	9JPAP510	7050408
		B1M951	J7B130255-1	JPDCV1AA	9JPDCV10	7050417
		B1M951	J7B130255-1	JPDCV1AC	9JPDCV10	7050408
	S07-002	B1M7F9	J7B130298-1	JPDMR1AA	9JPDMR10	7050424
		B1M7F9	J7B130298-1	JPDMR1AC	9JPDMR10	7050422
		B1M7F9	J7B130298-1	JPDMR1AD	9JPDMR10	7050426
		B1M7H2	J7B130298-2	JPDMT1AA	9JPDMT10	7050424

Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05121	S07-002	B1M7H7	J7B130298-3	JPDMW1AA	9JPDMW10	7050417
		B1M7H7	J7B130298-3	JPDMW1AC	9JPDMW10	7050420
		B1M7H7	J7B130298-3	JPDMW1AD	9JPDMW10	7050424
		B1M7H7	J7B130298-3	JPDMW1AE	9JPDMW10	7050408
		B1M7H7	J7B130298-3	JPDMW1AF	9JPDMW10	7050402
		B1M7H8	J7B130298-4	JPDM31AA	9JPDM310	7050417
		B1M7H8	J7B130298-4	JPDM31AC	9JPDM310	7050420
		B1M7H8	J7B130298-4	JPDM31AD	9JPDM310	7050424
		B1M7H8	J7B130298-4	JPDM31AE	9JPDM310	7050408
		B1M7H8	J7B130298-4	JPDM31AF	9JPDM310	7050402
	W07-002	B1M9B1	J7B150271-1	JPHEX1AA	9JPHEX10	7050428
		B1M9B1	J7B150271-1	JPHEX1AC	9JPHEX10	7050430
		B1M9B1	J7B150271-1	JPHEX1AD	9JPHEX10	7050420
		B1M9B1	J7B150271-1	JPHEX1AE	9JPHEX10	7050408
		B1M9C1	J7B150271-2	JPHFA1AA	9JPHFA10	7050428
		B1M9C1	J7B150271-2	JPHFA1AC	9JPHFA10	7050430
		B1M9C1	J7B150271-2	JPHFA1AD	9JPHFA10	7050420
		B1M9C1	J7B150271-2	JPHFA1AE	9JPHFA10	7050408
		B1M9C6	J7B150271-3	JPHEX1AA	9JPHEX10	7050428
		B1M9C6	J7B150271-3	JPHEX1AC	9JPHEX10	7050430
		B1M9C6	J7B150271-3	JPHEX1AD	9JPHEX10	7050420
		B1M9C6	J7B150271-3	JPHEX1AE	9JPHEX10	7050408
W05121	S07-002	B1M9D6	J7B150271-4	JPHEX1AA	9JPHEX10	7050428
		B1M9D6	J7B150271-4	JPHEX1AC	9JPHEX10	7050430
		B1M9D6	J7B150271-4	JPHEX1AD	9JPHEX10	7050420
		B1M9D6	J7B150271-4	JPHEX1AE	9JPHEX10	7050408
		B1M9D6	J7B150271-4	JPHEX1AA	9JPHEX10	7050428
		B1M9D6	J7B150271-4	JPHEX1AC	9JPHEX10	7050430

Comments:

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SDG Nbr	ORDER Nbr	CLIENT ID NUMBER	LOT Nbr	WORK ORDER	RPT DB ID	BATCH
W05121	S07-012	B1LD97	J7B150278-1	JPHGJ1AA	9JPHGJ10	7050417
		B1LD97	J7B150278-1	JPHGJ1AC	9JPHGJ10	7050428
		B1LD97	J7B150278-1	JPHGJ1AE	9JPHGJ10	7050408
		B1LD97	J7B150278-1	JPHGJ1AF	9JPHGJ10	7050402
		B1LD97	J7B150278-1	JPHGJ2AD	9JPHGJ20	7050430
	G07-002	B1M5Y2	J7B150285-1	JPHHE1AA	9JPHHE10	7050430
		B1M5X8	J7B150285-2	JPHHH1AA	9JPHHH10	7050430
		B1M5X9	J7B150285-3	JPHHN1AA	9JPHHN10	7050430
		B1M854	J7B180101-1	JPMDG1AA	9JPMDG10	7050420
		B1M854	J7B180101-1	JPMDG1AC	9JPMDG10	7050405
	W07-002	B1M8L2	J7B180101-2	JPMDH1AA	9JPMDH10	7050417
		B1M8L2	J7B180101-2	JPMDH1AC	9JPMDH10	7050405
		B1M8L2	J7B180101-2	JPMDH1AD	9JPMDH10	7050402
		B1M8J2	J7B180101-3	JPMDJ1AA	9JPMDJ10	7050417
		B1M8J2	J7B180101-3	JPMDJ1AC	9JPMDJ10	7050405
		B1M8J2	J7B180101-3	JPMDJ1AD	9JPMDJ10	7050402

Comments:

STL Richland
2800 George Washington Way
Richland, WA 99354

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Certificate of Analysis

Pacific Northwest National Laboratories
Sigma V Building
Richland, WA 99352

March 29, 2007

Attention: Dot Stewart

SAF Number	:	S07-012, G07-002, W07-002, S07-002
Date SDG Closed	:	February 15, 2007
Number of Samples	:	Twenty (20)
Sample Type	:	Water
SDG Number	:	W05121
Data Deliverable	:	45-Day / Summary

CASE NARRATIVE

I. Introduction

Between February 9, 2007 and February 15, 2007, twenty water samples were received at STL Richland (STLR) for radiochemical analysis. Upon receipt, the samples were assigned the following laboratory ID numbers to correspond with the Pacific Northwest National Laboratories (PGW) specific IDs:

<u>PGW ID#</u>	<u>STLR ID#</u>	<u>MATRIX</u>	<u>DATE OF RECEIPT</u>
B1M870	JPAPP	WATER	2/9/07
B1M902	JPAPR	WATER	2/9/07
B1M907	JPAP2	WATER	2/9/07
B1M906	JPAP5	WATER	2/9/07
B1M8L2	JPDCV	WATER	2/12/07
B1M7F9	JPDMR	WATER	2/12/07
B1M7H2	JPDMT	WATER	2/12/07
B1M7H7	JPDMW	WATER	2/12/07
B1M7H8	JPDM3	WATER	2/12/07
B1M9B1	JPHEX	WATER	2/13/07
B1MPC1	JPHFA	WATER	2/13/07
B1M9C6	JPHFH	WATER	2/13/07
B1M9D6	JPHFJ	WATER	2/13/07

B1LD97	JPHGJ	WATER	2/14/07
B1M5Y2	JPHHE	WATER	2/14/07
B1M5X8	JPHHH	WATER	2/14/07
B1M5X9	JPHHN	WATER	2/14/07
B1M854	JPMDG	WATER	2/15/07
B1M8L2	JPMDH	WATER	2/15/07
B1M8J2	JPMDJ	WATER	2/15/07

II. Sample Receipt

The samples were received in good condition and no anomalies were noted during check-in.

III. Analytical Results/Methodology

The analytical results for this report are presented by laboratory sample ID. Each set of data includes sample identification information, analytical results and the appropriate associated statistical errors.

The requested analyses were:

Alpha Spectroscopy

Plutonium-238, -239/240 by method RICH-RC-5010

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014

Gross Beta by method RICH-RC-5014

Strontium-90 by method RICH-RC-5006

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017

Iodine-129 (LL) by method RICH-RC-5025

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065

Tritium by method RICH-RC-5007

Laser Induced Phosphorimetry

Total Uranium by method RICH-RC-5058

IV. Quality Control

The analytical results for each analysis performed includes a minimum of one laboratory control sample (LCS), one method (reagent) blank, and one duplicate sample analysis. Any exceptions have been noted in the "Comments" section.

QC and sample results are reported in the same units.

V. Comments

Alpha Spectroscopy

Plutonium-238, -239/240 by method RICH-RC-5010

The LCS, batch blank, samples and sample duplicate (B1M7F9) results are within contractual requirements.

Gas Proportional Counting

Gross Alpha by method RICH-RC-5014:

The LCS, batch blank, samples and sample duplicate (B1M9B1) results are within contractual requirements.

Gross Beta by method RICH-RC-5014:

On the first analysis the duplicates were out. They were recounted with good results. The blank is above ½ the CRDL at 2.42. All samples except B1M5X9 have results that exceed the CRDL. Data is accepted. Except as noted, the LCS, batch blank, samples and sample duplicate (B1LD97) results are within contractual requirements.

Strontium-90 by method RICH-RC-5006

The LCS, batch blank, samples and sample duplicate (B1M7F9) results are within contractual requirements.

Gamma Spectroscopy

Gamma Spec (LL) by method RICH-RC-5017:

The LCS, batch blank, samples and sample duplicate (B1M7H8) results are within contractual requirements.

Iodine-129 (LL) by method RICH-RC-5025:

The LCS, batch blank, samples and sample duplicate (B1M7F9) results are within contractual requirements.

Liquid Scintillation Counting

Technetium-99 by TEVA method RICH-RC-5065:

The LCS, batch blank, samples, sample duplicate (B1M870), and sample matrix spike (B1M902) results are within contractual requirements.

Technetium-99 by method RICH-RC-5078:

The LCS, batch blank, samples, sample duplicate (B1M854), and sample matrix spike (B1M8L2) results are within contractual requirements.

Tritium by method RICH-RC-5007:

The LCS, batch blank, samples and sample duplicate (B1M8L2) results are within contractual requirements.

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March 29, 2007

Total Uranium

Total Uranium by method RICH-RC-5058:

The LCS, batch blank, samples, sample duplicate (B1M870), and sample matrix spike (B1M7H7) results are within contractual requirements.

I certify that this Certificate of Analysis is in compliance with the SOW, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hard copy data package has been authorized by the Laboratory Manager, or a designee as verified by the following signature.

Reviewed and approved:



Sherryl A. Adam
Project Manager

Drinking Water Method Cross References

DRINKING WATER ASTM METHOD CROSS REFERENCES		
Referenced Method	Isotope(s)	STL Richland's SOP number
EPA 901.1	Cs-134, I-131	RICH-RC-5017
EPA 900.0	Alpha & Beta	RICH-RC-5014
EPA 903.1	Ra-226	RICH-RC-5005
EPA 904.0	Ra-228	RICH-RC-5005
EPA 905.0	Sr89/90	RICH-RC-5006
ASTM D2460	Total Radium	RICH-RC-5027
Standard Method 7500-U-C & ASTM D5174	Uranium	RICH-RC-5058
EPA 906.0	Tritium	RICH-RC-5007
NOTE:		
The Gross Alpha LCS is prepared with Am-241 (unless otherwise specified in the case narrative)		
The Gross Beta LCS is prepared with Sr/Y-90 (unless otherwise specified in the case narrative)		

Uncertainty Estimation

STL Richland has adopted the internationally accepted approach to estimating uncertainties described in "NIST Technical Note 1297, 1994 Edition". The approach, "Law of Propagation of Errors", involves the identification of all variables in an analytical method which are used to derive a result. These variables are related to the analytical result (R) by some functional relationship, $R = \text{constants} * f(x, y, z, \dots)$. The components (x,y,z) are evaluated to determine their contribution to the overall method uncertainty. The individual component uncertainties (u_i) are then combined using a statistical model that provides the most probable overall uncertainty value. All component uncertainties are categorized as type A, evaluated by statistical methods, or type B, evaluated by other means. Uncertainties not included in the components, such as sample homogeneity, are combined with the component uncertainty as the square root of the sum-of-the-squares of the individual uncertainties. The uncertainty associated with the derived result is the combined uncertainty (u_c) multiplied by the coverage factor (1,2, or 3).

When three or more sample replicates are used to derive the analytical result, the type A uncertainty is the standard deviation of the mean value (S/\sqrt{n}), where S is the standard deviation of the derived results. The type B uncertainties are all other random or non-random components that are not included in the standard deviation.

The derivation of the general "Law of Propagation of Errors" equations and specific example are available on request.

Report Definitions

Action Lev	An agreed upon activity level used to trigger some action when the final result is greater than or equal to the Action Level. Often the Action Level is related to the Decision Limit.
Batch	The QC preparation batch number that relates laboratory samples to QC samples that were prepared and analyzed together.
Bias	Defined by the equation $(\text{Result}/\text{Expected}) - 1$ as defined by ANSI N13.30.
COC No	Chain of Custody Number assigned by the Client or STL Richland.
Count Error (#s)	Poisson counting statistics of the gross sample count and background. The uncertainty is absolute and in the same units as the result. For Liquid Scintillation Counting (LSC) the batch blank count is the background.
Total Uncert (#s) <i>u_c - Combined Uncertainty.</i>	All known uncertainties associated with the preparation and analysis of the sample are propagated to give a measure of the uncertainty associated with the result, <i>u_c the combined uncertainty</i> . The uncertainty is absolute and in the same units as the result.
(#s), Coverage Factor	The coverage factor defines the width of the confidence interval. 1, 2 or 3 standard deviations.
CRDL (RL)	Contractual Required Detection Limit as defined in the Client's Statement Of Work or STL Richland "default" nominal detection limit. Often referred to the reporting level (RL)
Lc	Decision Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume associated with the sample. The Type I error probability is approximately 5%. $L_c = (1.645 * \sqrt{2 * (BkgrndCnt/BkgrndCntMin)/SCntMin}) * (ConvFct/(Eff * Yld * Abn * Vol)) * IngrFct$. For LSC methods the batch blank is used as a measure of the background variability. Lc cannot be calculated when the background count is zero.
Lot-Sample No	The number assigned by the LIMS software to track samples received on the same day for a given client. The sample number is a sequential number assigned to each sample in the Lot.
MDC MDA	Detection Level based on instrument background or blank, adjusted by the Efficiency, Chemical Yield, and Volume with a Type I and II error probability of approximately 5%. $MDC = (4.65 * \sqrt{((BkgrndCnt/BkgrndCntMin)/SCntMin) + 2.71/SCntMin}) * (ConvFct/(Eff * Yld * Abn * Vol)) * IngrFct$. For LSC methods the batch blank is used as a measure of the background variability.
Primary Detector	The instrument identifier associated with the analysis of the sample aliquot.
Ratio U-234/U-238	The U-234 result divided by the U-238 result. The U-234/U-238 ratio for natural uranium in NIST SRM 4321C is 1.038.
Rst/MDC	Ratio of the Result to the MDC. A value greater than 1 may indicate activity above background at a high level of confidence. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Rst/TotUcert	Ratio of the Result to the Total Uncertainty. If the uncertainty has a coverage factor of 2 a value greater than 1 may indicate activity above background at approximately the 95% level of confidence assuming a two-sided confidence interval. Caution should be used when applying this factor and it should be used in concert with the qualifiers associated with the result.
Report DB No	Sample Identifier used by the report system. The number is based upon the first five digits of the Work Order Number.
RER	The equation Replicate Error Ratio = $(S-D)/[\sqrt{(TPUs^2 + TPUD^2)}]$ as defined by ICPT BOA where S is the original sample result, D is the result of the duplicate, TPUs is the total uncertainty of the original sample and TPUD is the total uncertainty of the duplicate sample.
SDG	Sample Delivery Group Number assigned by the Client or assigned by STL Richland upon sample receipt.
Sum Rpt Alpha Spec Rst(s)	The sum of the reported alpha spec results for tests derived from the same sample excluding duplicate result where the results are in the same units.
Work Order	The LIMS software assign test specific identifier.
Yield	The recovery of the tracer added to the sample such as Pu-242 used to trace a Pu-239/40 method.

3/29/2007 1:24:11 PM

STL Richland Report

Lab Code: STLR

FormNbr: R		FormatType: FEAD		Version: 05		Rpt Nbr: 34821		File Name: h:\Reportdb\edd\FeadIVRad\W05121.Edd, h:\Reportdb\edd\FeadIVRad\34821.Edd									
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analy Date/Time	Act				
9JPAP210	B1M907		MW6-SBB-A1	W07-002	W05121					02/09/2007 10:14							
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size						
7050417	H-3	10028-17-8	7.04E+03	pCi/L	2.9E+02	4.2E+02		2.98E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/13/2007 06:15				
7050408	TC-99	14133-76-7	2.64E+02	pCi/L	9.9E+00	2.1E+01		1.04E+01	100.0	TC99_ETVDSK_LS	1.257E-01	L	03/03/2007 02:19				
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analy Date/Time	Act				
9JPAP510	B1M906		MW6-SBB-A1	W07-002	W05121					02/09/2007 10:14							
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size						
7050417	H-3	10028-17-8	7.06E+03	pCi/L	2.9E+02	4.2E+02		2.97E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/13/2007 07:37				
7050408	TC-99	14133-76-7	2.57E+02	pCi/L	9.8E+00	2.1E+01		1.04E+01	100.0	TC99_ETVDSK_LS	1.251E-01	L	03/03/2007 03:22				
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analy Date/Time	Act				
9JPAPP10	B1M870		MW6-SBB-A1	W07-002	W05121					02/09/2007 08:27							
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size						
7050420	BE-7	13966-02-4	5.46E+00	pCi/L	2.6E+01	2.6E+01	U	4.94E+01		GAMMALL_GS	2.0026E+00	L	03/15/2007 11:48				
7050420	CO-60	10198-40-0	2.91E+01	pCi/L	8.4E+00	8.4E+00		4.68E+00		GAMMALL_GS	2.0026E+00	L	03/15/2007 11:48				
7050420	CS-134	13967-70-9	-3.62E+00	pCi/L	3.1E+00	3.1E+00	U	4.68E+00		GAMMALL_GS	2.0026E+00	L	03/15/2007 11:48				
7050420	CS-137	10045-97-3	-2.43E+00	pCi/L	2.6E+00	2.6E+00	U	4.18E+00		GAMMALL_GS	2.0026E+00	L	03/15/2007 11:48				
7050420	EU-152	14683-23-9	2.51E+00	pCi/L	5.8E+00	5.8E+00	U	1.09E+01		GAMMALL_GS	2.0026E+00	L	03/15/2007 11:48				
7050420	EU-154	15585-10-1	8.06E-01	pCi/L	7.3E+00	7.3E+00	U	1.43E+01		GAMMALL_GS	2.0026E+00	L	03/15/2007 11:48				
7050420	EU-155	14391-16-3	-5.41E-01	pCi/L	5.7E+00	5.7E+00	U	9.97E+00		GAMMALL_GS	2.0026E+00	L	03/15/2007 11:48				
7050420	K-40	13966-00-2	-4.83E+01	pCi/L	5.4E+01	5.4E+01	U	1.18E+02		GAMMALL_GS	2.0026E+00	L	03/15/2007 11:48				
7050420	RU-106	13967-48-1	-1.16E+01	pCi/L	2.2E+01	2.2E+01	U	3.87E+01		GAMMALL_GS	2.0026E+00	L	03/15/2007 11:48				
7050420	SB-125	14234-35-6	1.44E+00	pCi/L	6.0E+00	6.0E+00	U	1.12E+01		GAMMALL_GS	2.0026E+00	L	03/15/2007 11:48				
7050408	TC-99	14133-76-7	1.09E+04	pCi/L	5.7E+01	6.5E+02		1.02E+01	100.0	TC99_ETVDSK_LS	1.254E-01	L	03/15/2007 11:48				
7050402	Uranium	7440-61-1	2.52E+02	ug/L	3.1E+01	3.1E+01		7.73E-02		UTOT_KPA	2.71E-02	ML	03/02/2007 22:09				
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analy Date/Time	Act				
9JPAPR10	B1M902		MW6-SBB-A1	W07-002	W05121					02/09/2007 11:51							
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size						
7050417	H-3	10028-17-8	6.80E+03	pCi/L	2.9E+02	4.1E+02		2.98E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/13/2007 04:53				
7050408	TC-99	14133-76-7	9.06E+02	pCi/L	1.7E+01	5.9E+01		1.07E+01	100.0	TC99_ETVDSK_LS	1.25E-01	L	03/03/2007 00:14				

STL Richland

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual - Analyte was found in the associated laboratory blank above the MDC.

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34821 File Name: h:\Reportdb\ed\Feadi\Rad\W05121.Edd, h:\Reportdb\ed\Feadi\Rad\34821.Edd

Lab	Client	Test	Contract	SAF Nbr	Sdg Nbr	QC	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Analy Date/Time	Act
Sample Id:	Id:	User	Nbr			Type:							
9JPDVCV10	B1M951		MW6-SBB-A1	W07-002	W05121					02/12/2007 12:39			
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size		
7050417	H-3	10028-17-8	1.01E+03	pCi/L	1.6E+02	1.8E+02		2.99E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/13/2007 08:59
7050408	TC-99	14133-76-7	2.34E+02	pCi/L	9.4E+00	2.0E+01		1.03E+01	100.0	TC99_ETVDSK_LS	1.251E-01	L	03/03/2007 04:24

[illegible]

Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:			
JPDMR10	B1M7F9		MW6-SBB-A1	S07-002	W05121					02/12/2007 12:37			
Batch	Analyle	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	Method	Atq Size	Unit	Analy Date/Time	Act
550424	I-129L	15046-84-1	4.24E+00	pCi/L	6.7E-01	6.7E-01		3.21E-01	I129LL_SEP_LEPS	3.9656E+00	L	03/13/2007 13:57	I
550422	PU-238	13981-16-3	2.97E-02	pCi/L	7.6E-02	7.6E-02	U	1.78E-01	PUIISO_PLATE_AE	2.006E-01	L	03/06/2007 19:04	I
550422	PU-239	PU-239/240	-7.44E-03	pCi/L	7.6E-02	7.6E-02	U	1.78E-01	PUIISO_PLATE_AE	2.006E-01	L	03/06/2007 19:04	I
550426	SR-90	10098-97-2	5.49E-01	pCi/L	4.3E-01	4.4E-01	U	8.52E-01	SRIISO_SEP_PRE	9.035E-01	L	03/11/2007 09:19	I
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%*:	Distilled Volume	Sample On Date:	Collection Date:			

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/29/2007 1:24:11 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD Version: 05 Rpt Nbr: 34821 File Name: h:\Reportdb\edd\Fead\Rad\W05121.Edd, h:\Reportdb\edd\Fead\Rad\34821.Edd

9JPDMT10 B1M7H2 MW6-SBB-A1 S07-002 W05121 02/12/2007 10:36

Batch	Sample Id:	Client	Test User	Contract Nbr	Result	Unit	CntU 2S	Sdg Nbr	QC Type	Moisture/ Solids%:	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7050424	I-129L			3.82E-01	pCi/L	2.8E-01	2.8E-01	2.8E-01	U	3.78E-01	94.6	I129LL_SEP_LEPS	3.9326E+00	L	03/13/2007	13:57	

Batch	Sample Id:	Client	Test User	Contract Nbr	Result	Unit	CntU 2S	Sdg Nbr	QC Type	Moisture/ Solids%:	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
9JPDMMW10 B1M7H7				MW6-SBB-A1 S07-002		pCi/L	4.0E+02	7.0E+02	U	3.00E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/13/2007	11:42	
7050417	H-3			1.44E+04	pCi/L	2.7E+01	2.7E+01	2.7E+01	U	4.76E+01	GAMMALL_GS	1.999E+00	L	03/15/2007	11:48		
7050420	BE-7			6.14E+01	pCi/L	3.4E+00	3.4E+00	3.4E+00	U	5.82E+00	GAMMALL_GS	1.999E+00	L	03/15/2007	11:48		
7050420	CO-60			-1.38E+00	pCi/L	2.8E+00	2.8E+00	2.8E+00	U	5.70E+00	GAMMALL_GS	1.999E+00	L	03/15/2007	11:48		
7050420	CS-134			3.03E+00	pCi/L	6.1E+00	6.1E+00	6.1E+00	U	1.14E+01	GAMMALL_GS	1.999E+00	L	03/15/2007	11:48		
7050420	EU-152			2.56E+00	pCi/L	6.2E+00	6.2E+00	6.2E+00	U	1.43E+01	GAMMALL_GS	1.999E+00	L	03/15/2007	11:48		
7050420	EU-154			5.17E+00	pCi/L	4.7E+00	4.7E+00	4.7E+00	U	8.09E+00	GAMMALL_GS	1.999E+00	L	03/15/2007	11:48		
7050420	EU-155			-1.30E+00	pCi/L	4.8E+01	4.8E+01	4.8E+01	U	1.08E+02	GAMMALL_GS	1.999E+00	L	03/15/2007	11:48		
7050420	K-40			1.87E+01	pCi/L	2.5E+01	2.5E+01	2.5E+01	U	4.52E+01	GAMMALL_GS	1.999E+00	L	03/15/2007	11:48		
7050420	RU-106			-5.22E+00	pCi/L	5.3E+00	5.3E+00	5.3E+00	U	9.86E+00	GAMMALL_GS	1.999E+00	L	03/15/2007	11:48		
7050420	SB-125			4.76E-01	pCi/L	5.9E-01	5.9E-01	5.9E-01	U	3.09E-01	94.9	I129LL_SEP_LEPS	3.9613E+00	L	03/13/2007	15:43	
7050424	I-129L			3.23E+00	pCi/L	8.3E+01	8.3E+01	8.3E+01	U	1.02E+01	100.0	TC99_ETVDSK_LS	1.249E-01	L	03/03/2007	05:27	
7050408	TC-99			2.30E+04	pCi/L	1.1E+00	1.1E+00	1.1E+00	U	8.32E-02	UTOT_KPA	2.52E-02	ML	03/20/2007	15:34		
7050402	Uranium			9.01E+00	ug/L												

Batch	Sample Id:	Client	Test User	Contract Nbr	Result	Unit	CntU 2S	Sdg Nbr	QC Type	Moisture/ Solids%:	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
9JPDMMW10 B1M9B1				MW6-SBB-A1 W07-002		pCi/L	1.2E+00	1.2E+00	U	1.98E+00	100.0	9310_ALPHA_BETA	1.788E-01	L	03/23/2007	16:57	
7050428	ALPHA			1.24E+00	pCi/L	4.6E+00	4.6E+00	4.6E+00	U	2.80E+00	100.0	9310_ALPHA_BETA	1.99E-01	L	03/23/2007	17:23	
7050430	BETA			9.09E+01	pCi/L	1.9E+01	1.9E+01	1.9E+01	U	3.65E+01	GAMMALL_GS	1.9994E+00	L	03/15/2007	11:49		
7050420	BE-7			9.61E-01	pCi/L	2.0E+00	2.0E+00	2.0E+00	U	3.80E+00	GAMMALL_GS	1.9994E+00	L	03/15/2007	11:49		
7050420	CO-60			-3.32E-01	pCi/L	2.0E+00	2.0E+00	2.0E+00	U	4.03E+00	GAMMALL_GS	1.9994E+00	L	03/15/2007	11:49		
7050420	CS-134			5.18E-01	pCi/L	1.8E+00	1.8E+00	1.8E+00	U	3.48E+00	GAMMALL_GS	1.9994E+00	L	03/15/2007	11:49		
7050420	CS-137			2.15E-02	pCi/L	5.1E+00	5.1E+00	5.1E+00	U	1.00E+01	GAMMALL_GS	1.9994E+00	L	03/15/2007	11:49		
7050420	EU-152			4.93E+00	pCi/L	5.3E+00	5.3E+00	5.3E+00	U	1.29E+01	GAMMALL_GS	1.9994E+00	L	03/15/2007	11:49		
7050420	EU-154			5.21E+00	pCi/L												

STL Richland

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

rptFeadRadSummaryEdd v3.48

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/29/2007 1:24:11 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R		FormatType: FEAD		Version: 05		Rpt Nbr: 34821		File Name: h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd						
Lab	Client	Test	Contract	SAF Nbr	Sdg Nbr:	QC	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Alq Size	Analy Date/Time	Act
7050420	EU-155	14391-16-3	-3.40E+00	pCi/L	3.6E+00	3.6E+00	U	5.84E+00			L	1.9994E+00	03/15/2007 11:49	I
7050420	K-40	13966-00-2	-9.08E+00	pCi/L	3.0E+01	3.0E+01	U	6.18E+01			L	1.9994E+00	03/15/2007 11:49	I
7050420	RU-106	13967-48-1	6.38E+00	pCi/L	1.9E+01	1.9E+01	U	3.66E+01			L	1.9994E+00	03/15/2007 11:49	I
7050420	SB-125	14234-35-6	-7.82E-01	pCi/L	4.9E+00	4.9E+00	U	8.93E+00			L	1.9994E+00	03/15/2007 11:49	I
7050408	TC-99	14133-76-7	3.49E+02	pCi/L	1.1E+01	2.6E+01		1.04E+01 100.0	TC99_ETVDSK_LS 1.252E-01		L		03/03/2007 07:32	I
02/13/2007 11:13														
Batch	Analyte	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7050428	ALPHA	12587-46-1	2.25E-01	pCi/L	5.1E-01	5.2E-01	U	1.20E+00	100.0	9310_ALPHABETA	2.025E-01	L	03/23/2007 16:57	I
7050430	BETA	12587-47-2	2.80E+02	pCi/L	7.8E+00	3.6E+01		2.83E+00	100.0	9310_ALPHABETA	2.007E-01	L	03/23/2007 17:23	I
7050420	BE-7	13966-02-4	1.73E+01	pCi/L	1.7E+01	1.7E+01	U	3.45E+01		GAMMALL_GS	2.0043E+00	L	03/15/2007 11:50	I
7050420	CO-60	10198-40-0	9.23E-02	pCi/L	1.6E+00	1.6E+00	U	3.21E+00		GAMMALL_GS	2.0043E+00	L	03/15/2007 11:50	I
7050420	CS-134	13967-70-9	4.27E-02	pCi/L	1.9E+00	1.9E+00	U	3.56E+00		GAMMALL_GS	2.0043E+00	L	03/15/2007 11:50	I
7050420	CS-137	10045-97-3	-3.91E-01	pCi/L	1.6E+00	1.6E+00	U	2.90E+00		GAMMALL_GS	2.0043E+00	L	03/15/2007 11:50	I
7050420	EU-152	14683-23-9	7.80E-01	pCi/L	4.3E+00	4.3E+00	U	7.77E+00		GAMMALL_GS	2.0043E+00	L	03/15/2007 11:50	I
7050420	EU-154	15585-10-1	1.29E+00	pCi/L	4.3E+00	4.3E+00	U	8.92E+00		GAMMALL_GS	2.0043E+00	L	03/15/2007 11:50	I
7050420	EU-155	14391-16-3	2.40E-01	pCi/L	3.5E+00	3.5E+00	U	6.41E+00		GAMMALL_GS	2.0043E+00	L	03/15/2007 11:50	I
7050420	K-40	13966-00-2	-1.59E+00	pCi/L	2.6E+01	2.6E+01	U	5.44E+01		GAMMALL_GS	2.0043E+00	L	03/15/2007 11:50	I
7050420	RU-106	13967-48-1	-9.39E+00	pCi/L	1.4E+01	1.4E+01	U	2.42E+01		GAMMALL_GS	2.0043E+00	L	03/15/2007 11:50	I
7050420	SB-125	14234-35-6	-2.52E+00	pCi/L	3.9E+00	3.9E+00	U	6.51E+00		GAMMALL_GS	2.0043E+00	L	03/15/2007 11:50	I
7050408	TC-99	14133-76-7	1.01E+03	pCi/L	1.8E+01	6.5E+01		1.04E+01 100.0	TC99_ETVDSK_LS 1.26E-01		L		03/03/2007 08:34	I
02/13/2007 10:09														
Lab	Client	Test	Contract	SAF Nbr	Sdg Nbr:	QC	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:	Unit	Alq Size	Analy Date/Time	Act
7050428	ALPHA	12587-46-1	1.89E-01	pCi/L	8.5E-01	8.5E-01	U	2.27E+00	100.0	9310_ALPHABETA	1.796E-01	L	03/23/2007 16:57	I
7050430	BETA	12587-47-2	5.68E+01	pCi/L	4.0E+00	8.3E+00	U	3.09E+00	100.0	9310_ALPHABETA	1.742E-01	L	03/23/2007 17:23	I
7050420	BE-7	13966-02-4	-4.26E-01	pCi/L	1.6E+01	1.6E+01	U	2.91E+01		GAMMALL_GS	2.0006E+00	L	03/15/2007 11:50	I
7050420	CO-60	10198-40-0	-7.65E-01	pCi/L	1.5E+00	1.5E+00	U	2.60E+00		GAMMALL_GS	2.0006E+00	L	03/15/2007 11:50	I
7050420	CS-134	13967-70-9	-8.71E-01	pCi/L	1.6E+00	1.6E+00	U	2.81E+00		GAMMALL_GS	2.0006E+00	L	03/15/2007 11:50	I
7050420	CS-137	10045-97-3	-2.16E-01	pCi/L	1.8E+00	1.8E+00	U	3.14E+00		GAMMALL_GS	2.0006E+00	L	03/15/2007 11:50	I
7050420	EU-152	14683-23-9	-8.68E-01	pCi/L	3.5E+00	3.5E+00	U	6.22E+00		GAMMALL_GS	2.0006E+00	L	03/15/2007 11:50	I

STL Richland

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

rptFeadRadSummaryEdd v3.48

3/29/2007 1:24:11 PM

STL Richland Report

Lab Code: STLRL

FormNbr:	R	FormatType:	FEAD	Version:	05	Rpt Nbr:	34821	File Name:	h:\Reportdb\edd\Feed\IVRad\W05121.Edd, h:\Reportdb\edd\Feed\IVRad\34821.Edd					
7050420	EU-154	15585-10-1	-1.82E+00	pCi/L	4.4E+00	4.4E+00	U	8.01E+00	GAMMALL_GS	2.0006E+00	L	03/15/2007	11:50	
7050420	EU-155	14391-16-3	3.31E-01	pCi/L	3.0E+00	3.0E+00	U	5.59E+00	GAMMALL_GS	2.0006E+00	L	03/15/2007	11:50	
7050420	K-40	13966-00-2	7.03E+01	pCi/L	3.2E+01	3.2E+01	U	6.82E+01	GAMMALL_GS	2.0006E+00	L	03/15/2007	11:50	
7050420	RU-106	13967-48-1	-2.57E+00	pCi/L	1.5E+01	1.5E+01	U	2.72E+01	GAMMALL_GS	2.0006E+00	L	03/15/2007	11:50	
7050420	SB-125	14234-35-6	-2.89E+00	pCi/L	3.6E+00	3.6E+00	U	5.83E+00	GAMMALL_GS	2.0006E+00	L	03/15/2007	11:50	
7050408	TC-99	14133-76-7	2.16E+02	pCi/L	9.2E+00	1.8E+01		1.04E+01	100.0	TC99_ETVDSK_LS	1.268E-01	L	03/03/2007	10:39
MW6-SBB-A1 W07-002 W05121														
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9JPHFJ10	B1M9D6	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7050428	ALPHA	12587-46-1	6.93E-01	pCi/L	7.1E-01	7.3E-01	U	9.94E-01	100.0	9310_ALPHABETA	2.004E-01	L	03/23/2007	16:57
7050430	BETA	12587-47-2	3.45E+02	pCi/L	8.6E+00	6.5E+01		2.79E+00	100.0	9310_ALPHABETA	1.997E-01	L	03/23/2007	17:27
7050420	BE-7	13966-02-4	4.90E+00	pCi/L	2.1E+01	2.1E+01	U	3.82E+01		GAMMALL_GS	2.00E+00	L	03/15/2007	11:50
7050420	CO-60	10198-40-0	-1.45E-01	pCi/L	2.3E+00	2.3E+00	U	4.30E+00		GAMMALL_GS	2.00E+00	L	03/15/2007	11:50
7050420	CS-134	13967-70-9	1.09E+00	pCi/L	2.4E+00	2.4E+00	U	4.57E+00		GAMMALL_GS	2.00E+00	L	03/15/2007	11:50
7050420	CS-137	10045-97-3	-1.08E-02	pCi/L	2.0E+00	2.0E+00	U	3.68E+00		GAMMALL_GS	2.00E+00	L	03/15/2007	11:50
7050420	EU-152	14683-23-9	3.57E+00	pCi/L	6.1E+00	6.1E+00	U	1.09E+01		GAMMALL_GS	2.00E+00	L	03/15/2007	11:50
7050420	EU-154	15585-10-1	1.47E+00	pCi/L	6.2E+00	6.2E+00	U	1.23E+01		GAMMALL_GS	2.00E+00	L	03/15/2007	11:50
7050420	EU-155	14391-16-3	-1.54E+00	pCi/L	5.4E+00	5.4E+00	U	9.53E+00		GAMMALL_GS	2.00E+00	L	03/15/2007	11:50
7050420	K-40	13966-00-2	-3.17E+01	pCi/L	6.3E+01	6.3E+01	U	1.40E+02		GAMMALL_GS	2.00E+00	L	03/15/2007	11:50
7050420	RU-106	13967-48-1	-6.23E+00	pCi/L	1.9E+01	1.9E+01	U	3.23E+01		GAMMALL_GS	2.00E+00	L	03/15/2007	11:50
7050420	SB-125	14234-35-6	2.54E-01	pCi/L	5.3E+00	5.3E+00	U	9.51E+00		GAMMALL_GS	2.00E+00	L	03/15/2007	11:50
7050408	TC-99	14133-76-7	1.43E+03	pCi/L	2.1E+01	9.0E+01		1.03E+01	100.0	TC99_ETVDSK_LS	1.256E-01	L	03/03/2007	11:41
MW6-SBB-A1 S07-012 W05121														
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:				
9JPHGJ10	B1LD97	CAS#	Result	Unit	CntU 2S	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7050417	H-3	10028-17-8	1.48E+03	pCi/L	1.7E+02	2.0E+02		2.97E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/13/2007	14:25
7050428	ALPHA	12587-46-1	1.90E+00	pCi/L	1.3E+00	1.3E+00		1.70E+00	100.0	9310_ALPHABETA	2.004E-01	L	03/23/2007	18:51
7050408	TC-99	14133-76-7	4.62E+00	pCi/L	4.4E+00	5.9E+00	U	1.01E+01	100.0	TC99_ETVDSK_LS	1.255E-01	L	03/03/2007	12:44
7050402	Uranium	7440-61-1	6.08E+00	ug/L	6.2E-01	6.2E-01		8.38E-02		UTOT_KPA	2.50E-02	ML	03/20/2007	15:46
Lab Sample Id:	Client Id:	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:				

STL Richland

rptFeedRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

5

3/29/2007 1:24:11 PM

STL Richland Report

Lab Code: STLR

FormNbr: R		FormatType: FEAD		Version: 05		Rpt Nbr: 34821		File Name: h:\Reportdb\edd\Fead\IVRad\W05121.Edd, h:\Reportdb\edd\Fead\IVRad\34821.Edd							
9JPHGJ20 B1LD97		MW6-SBB-A1		S07-012		W05121		02/14/2007 10:50							
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Sdg Nbr:	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7050430	BETA	12587-47-2	8.34E+00	pCi/L	1.9E+00	2.2E+00	2.2E+00		3.09E+00	100.0	9310_ALPHABETA	2.002E-01	L	03/27/2007 11:46	I
Lab	Client	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:					
9JPHHE10 B1M5Y2			MW6-SBB-A1	G07-002	W05121					02/14/2007 09:44					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Sdg Nbr:	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7050430	BETA	12587-47-2	1.46E+01	pCi/L	2.2E+00	3.5E+00	3.5E+00		2.93E+00	100.0	9310_ALPHABETA	1.975E-01	L	03/23/2007 17:27	I
Lab	Client	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:					
9JPHHH10 B1M5X8			MW6-SBB-A1	G07-002	W05121					02/14/2007 08:50					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Sdg Nbr:	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7050430	BETA	12587-47-2	2.19E+03	pCi/L	2.3E+01	4.3E+02	4.3E+02		3.08E+00	100.0	9310_ALPHABETA	1.619E-01	L	03/23/2007 17:27	I
Lab	Client	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:					
9JPHHN10 B1M5X9			MW6-SBB-A1	G07-002	W05121					02/14/2007 07:30					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Sdg Nbr:	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7050430	BETA	12587-47-2	1.06E+00	pCi/L	1.3E+00	1.3E+00	1.3E+00	U	2.67E+00	100.0	9310_ALPHABETA	2.029E-01	L	03/23/2007 17:27	I
Lab	Client	Test User	Contract Nbr	SAF Nbr	Sdg Nbr:	QC Type:	Moisture/ Solids%:	Distilled Volume	Sample On Date:	Collection Date:					
9JPMDG10 B1M854			MW6-SBB-A1	W07-002	W05121					02/15/2007 10:31					
Batch	Analyte	CAS#	Result	Unit	CntU 2S	Sdg Nbr:	TotU 2S	Qual	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
7050420	BE-7	13966-02-4	-9.92E+00	pCi/L	2.4E+01	2.4E+01	2.4E+01	U	4.10E+01		GAMMALL_GS	2.0059E+00	L	03/15/2007 13:37	I
7050420	CO-60	10198-40-0	2.52E+01	pCi/L	6.7E+00	6.7E+00	6.7E+00		3.41E+00		GAMMALL_GS	2.0059E+00	L	03/15/2007 13:37	I
7050420	CS-134	13967-70-9	1.64E+00	pCi/L	2.9E+00	2.9E+00	2.9E+00	U	5.72E+00		GAMMALL_GS	2.0059E+00	L	03/15/2007 13:37	I
7050420	CS-137	10045-97-3	1.78E+00	pCi/L	2.3E+00	2.3E+00	2.3E+00	U	4.78E+00		GAMMALL_GS	2.0059E+00	L	03/15/2007 13:37	I
7050420	EU-152	14683-23-9	-2.11E+00	pCi/L	5.8E+00	5.8E+00	5.8E+00	U	1.01E+01		GAMMALL_GS	2.0059E+00	L	03/15/2007 13:37	I
7050420	EU-154	15585-10-1	3.93E+00	pCi/L	7.2E+00	7.2E+00	7.2E+00	U	1.53E+01		GAMMALL_GS	2.0059E+00	L	03/15/2007 13:37	I
7050420	EU-155	14391-16-3	-9.77E-02	pCi/L	5.6E+00	5.6E+00	5.6E+00	U	9.99E+00		GAMMALL_GS	2.0059E+00	L	03/15/2007 13:37	I
7050420	K-40	13966-00-2	-3.52E+01	pCi/L	5.5E+01	5.5E+01	5.5E+01	U	1.22E+02		GAMMALL_GS	2.0059E+00	L	03/15/2007 13:37	I
7050420	RU-106	13967-48-1	3.26E+00	pCi/L	1.9E+01	1.9E+01	1.9E+01	U	3.59E+01		GAMMALL_GS	2.0059E+00	L	03/15/2007 13:37	I
7050420	SB-125	14234-35-6	6.49E-01	pCi/L	5.4E+00	5.4E+00	5.4E+00	U	1.01E+01		GAMMALL_GS	2.0059E+00	L	03/15/2007 13:37	I
7050405	TC-99	14133-76-7	9.16E+03	pCi/L	5.3E+01	5.5E+02	5.5E+02		1.05E+01	100.0	TC99_SEP_LSC	1.248E-01	L	03/07/2007 16:03	I

STL Richland

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual - Analyte was found in the associated laboratory blank above the MDC.

rptFeadRadSummaryEdd v3.48

3/29/2007 1:24:12 PM

STL Richland Report

Lab Code: STLRL

FormNbr: R	FormatType: FEAD	Version: 05	Rpt Nbr: 34821	File Name: h:\Reportdb\edd\Fead\Rad\W05121.Edd, h:\Reportdb\edd\Fead\Rad\34821.Edd
Lab Sample Id: 9JPMJDH10 B1M8L2	Test User	Contract Nbr	SAF Nbr	Sdg Nbr
Batch Analyte	CAS#	Result	Unit	CntU 2S
7050417 H-3	10028-17-8	1.22E+04	pCi/L	3.7E+02
7050405 TC-99	14133-76-7	7.98E+02	pCi/L	1.6E+01
7050402 Uranium	7440-61-1	6.14E+00	ug/L	6.3E-01
Lab Sample Id: 9JPMJDJ10 B1M8J2	Test User	Contract Nbr	SAF Nbr	Sdg Nbr
Batch Analyte	CAS#	Result	Unit	CntU 2S
7050417 H-3	10028-17-8	1.37E+04	pCi/L	3.9E+02
7050405 TC-99	14133-76-7	1.27E+02	pCi/L	7.4E+00
7050402 Uranium	7440-61-1	6.20E+00	ug/L	6.3E-01

Moisture/ Solids%*	QC Type:	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
2.98E+02	6.1E+02	2.98E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/13/2007 19:52	I
1.03E+01	5.3E+01	1.03E+01	100.0	TC99_SEP_LSC	1.258E-01	L	03/07/2007 18:08	I
8.09E-02	6.3E-01	8.09E-02		UTOT_KPA	2.59E-02	ML	03/20/2007 15:48	I

Moisture/ Solids%*	QC Type:	MDA	TrcYield	Method	Alq Size	Unit	Analy Date/Time	Act
2.98E+02	6.7E+02	2.98E+02	100.0	906.0_H3_LSC	5.00E-03	L	03/13/2007 21:14	I
1.02E+01	1.3E+01	1.02E+01	100.0	TC99_SEP_LSC	1.272E-01	L	03/07/2007 20:14	I
8.32E-02	6.3E-01	8.32E-02		UTOT_KPA	2.52E-02	ML	03/20/2007 15:50	I

STL Richland

rptFeadRadSummaryEdd v3.48

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, March 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\IV\Rad\W05121.Edd, h:\Reportdb\edd\Fead\IV\Rad\34821.Edd

Lab Sample Id: JPNH01AB

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BLK

Collection Date: 02/09/2007 08:27

Sample On Date:

Received Date: 02/09/2007

SAF Nbr Contract Nbr
MW6-SBB-A19981

Test User

Case Nbr

SAS Nbr

Suffix

Decant

Distilled Volume

File Id

FSuffix RType
Bl HBatch # /
Qc Type CAS#
7050402 Uranium
BLK 7440-61-1Result/
Orig Rst
4.68E-02Unit ug/L
Tot/Cnt
Uncert 2S
5.9E-03
5.9E-03Qu-
al U
MDC
8.32E-02Tracer
YieldSpk Concl/
%RecAnaly
Method
UTOT_KPAAliq
Size/
2.52E-02
MLDate/Time
Analyzed
03/20/2007
15:15RPD/
UCL
RER/
UCLLCS
LCL/UCL
Type
D

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, March 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD

VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd

Lab Sample Id: JPNH21AB

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BLK

Collection Date: 02/15/2007 10:31

Sample On Date:

Received Date: 02/15/2007

SAF Nbr Contract Nbr
MW6-SBB-A19981

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	RTyp
7050405	TC-99	3.39E+00	pCi/L	6.2E+00	U	1.02E+01	100.0		TC99_SEP_LS	1.273E-01	03/07/2007				D
BLK	14133-76-7			4.3E+00							21:16				

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, March 29, 2007

STL Richland QC Blank Report

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\FeadIVRad\W05121.Edd, h:\Reportdb\edd\FeadIVRad\34821.Edd Lab Code: STLRL

Lab Sample Id: JPNH31AB

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BLK

34821

Collection Date: 02/09/2007 08:27

Sample On Date:

Received Date: 02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BN	H

Batch # /
Qc Type
7050408 TC-99
BLK 14133-76-7

Result/
Orig Rst
2.92E+00

Unit
pCi/L
5.9E+00
4.3E+00

Qu-
al
U 1.02E+01 100.0

Tracer
Yield
100.0

Analy
Method
TC99_ETVDSK

Spk Conc/
%Rec
1.254E-01
L

Date/Time
Analyzed
03/03/2007
13:46

RPD/
UCL
RER/
UCL

LCS
LCL/UCL
Typ
D

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual - Analyte was found in the associated laboratory blank above the MDC.

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Thursday, March 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05121.Edd, h:\Reportdb\edd\Fead\Rad\34821.Edd

Lab Sample Id: JPNH51AB

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BLK

34821

Collection Date: 02/12/2007 12:39

Sample On Date:

Received Date: 02/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BP	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7050417 BLK	H-3 10028-17-8	-4.14E+01	pCi/L	1.3E+02 1.2E+02	U	2.99E+02	100.0		906.0_H3_LSC	5.00E-03	03/13/2007 02:10				D

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, March 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\ledd\Fead\IV\Rad\W05121.Edd, h:\Reportdb\ledd\Fead\IV\Rad\34821.Edd

Lab Sample Id: JPNH51DX

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BLK

Collection Date: 02/12/2007 12:39

Sample On Date:

Received Date: 02/12/2007

SAF Nbr Contract Nbr
MW6-SBB-A19981

Test User

Case Nbr SAS Nbr

Suffix

Decant

Distilled Volume

File Id

FSuffix RTyp
BR H

Batch # /

Qc Type CAS#

7050417 H-3

BLK 10028-17-8

Result/

Orig Rst

-5.63E+01

Qu-

al

U

Tot/Cnt

Uncert 2S

1.3E+02

1.2E+02

Tracer

Yield

100.0

MDC

3.03E+02

Spk Conc/

%Rec

Analy

Method

906.0_H3_LSC

Aliq

Size/

5.00E-03

Date/Time

Analyzed

03/13/2007

17:08

RPD/

UCL

RER/

UCL

LCS

R

LCL/UCL Typ

D

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, March 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Feed\IVRad\W05121.Edd, h:\Reportdb\edd\Feed\IVRad\34821.Edd

Lab Sample Id: JPNJF1AB

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

Collection Date: 02/12/2007 11:36

QC Type: BLK

Sample On Date:

Received Date: 02/12/2007

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCU/CL	R Type
7050420	BE-7	1.10E+01	pCi/L	2.5E+01	U	4.77E+01			GAMMALL_GS	2.0001E+00	03/15/2007				D
BLK	13966-02-4			2.5E+01						L	13:38				
7050420	CO-60	-4.71E-01	pCi/L	2.5E+00	U	4.70E+00			GAMMALL_GS	2.0001E+00	03/15/2007				D
BLK	10198-40-0			2.5E+00						L	13:38				
7050420	CS-134	2.48E+00	pCi/L	2.6E+00	U	5.50E+00			GAMMALL_GS	2.0001E+00	03/15/2007				D
BLK	13967-70-9			2.6E+00						L	13:38				
7050420	CS-137	1.20E+00	pCi/L	2.3E+00	U	4.61E+00			GAMMALL_GS	2.0001E+00	03/15/2007				D
BLK	10045-97-3			2.3E+00						L	13:38				
7050420	EU-152	-3.72E+00	pCi/L	4.9E+00	U	8.19E+00			GAMMALL_GS	2.0001E+00	03/15/2007				D
BLK	14683-23-9			4.9E+00						L	13:38				
7050420	EU-154	-1.94E+00	pCi/L	5.1E+00	U	9.43E+00			GAMMALL_GS	2.0001E+00	03/15/2007				D
BLK	15585-10-1			5.1E+00						L	13:38				
7050420	EU-155	4.20E-01	pCi/L	3.9E+00	U	6.93E+00			GAMMALL_GS	2.0001E+00	03/15/2007				D
BLK	14391-16-3			3.9E+00						L	13:38				
7050420	K-40	-3.10E+01	pCi/L	4.2E+01	U	9.02E+01			GAMMALL_GS	2.0001E+00	03/15/2007				D
BLK	13966-00-2			4.2E+01						L	13:38				
7050420	RU-106	-1.03E+01	pCi/L	2.0E+01	U	3.46E+01			GAMMALL_GS	2.0001E+00	03/15/2007				D
BLK	13967-48-1			2.0E+01						L	13:38				
7050420	SB-125	1.57E+00	pCi/L	5.7E+00	U	1.06E+01			GAMMALL_GS	2.0001E+00	03/15/2007				D
BLK	14234-35-6			5.7E+00						L	13:38				

STL Richland

rptFeedRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, March 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\IV\Rad\W05121.Edd, h:\Reportdb\edd\Fead\IV\Rad\34821.Edd

Lab Sample Id: JPNJU1AB

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BLK

Collection Date: 02/12/2007 12:37

Sample On Date:

Received Date: 02/12/2007

SAF Nbr Contract Nbr
MW6-SBB-A19981

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ	FSuffix	RTyp
7050422	PU-238	3.18E-02	pCi/L	8.1E-02	U	1.90E-01	82.4		PUISO_PLATE	2.057E-01	03/06/2007				D		
BLK	13981-16-3			8.1E-02						L	19:05						
7050422	PU-239	-7.95E-03	pCi/L	8.1E-02	U	1.90E-01	82.4		PUISO_PLATE	2.057E-01	03/06/2007				D		
BLK	PU-239/240			8.1E-02						L	19:05						

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

Thursday, March 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05121.Edd, h:\Reportdb\edd\Fead\Rad\34821.Edd

Lab Sample Id: JPNJM1AB

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BLK

34821

Collection Date: 02/12/2007 12:37

Sample On Date:

Received Date: 02/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp			
	MW6-SBB-A19981								BX	H			
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ Date/Time Analyzed	RER/ UCL	LCS LCL/UCL	R Typ
7050424 BLK	I-129L 15046-84-1	-3.62E-02	pCi/L	1.2E-01 1.2E-01	U	2.21E-01	94.9		I129LL_SEP_L	3.7451E+00	03/13/2007		D
										L	15:44		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Thursday, March 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd

Lab Sample Id: JPNJR1AB

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BLK

34821

Collection Date: 02/12/2007 12:37

Sample On Date:

Received Date: 02/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BZ	H					
Batch # /	Analyt/	Result/	Unit	Tot/Cnt	Qu-	MDC	Tracer	Spk Conc/	Analy	Aliq	Date/Time	RPD/	RER/	LCS	R
Qc Type	CAS#	Orig Rst	pCi/L	Uncert 2S	al		Yield	%Rec	Method	Size/	Analyzed	UCL	UCL	LCL/UCL	Type
7050426	SR-90	3.29E-01		2.5E-01	U	4.79E-01	80.2		SRISO_SEP_P	1.0025E+00	03/11/2007				D
BLK	10098-97-2			2.5E-01						L	09:19				

STL Richland

rpifeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

9

Lab Code: STLRL

File Name: h:\Reportdb\edd\Fead\VRad\W05121.Edd, h:\F

Received Date: 02/13/2007

FSuffix	RTyp
CB	H

ScriptFeaRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

10

Thursday, March 29, 2007

STL Richland QC Blank Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd

Lab Sample Id: JPNJW1AB

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BLK

Collection Date: 02/14/2007 10:50

Sample On Date:

Received Date: 02/14/2007

SAF Nbr Contract Nbr
MW6-SBB-A19981

Test User

Case Nbr SAS Nbr

Suffix

Decant

Distilled Volume

File Id

FSuffix RType
CD HBatch # / Analyt/
Qc Type CAS#
7050430 BETA
BLK 12587-47-2Result/
Orig Rst
2.42E+00Unit
pCi/L
1.5E+00
1.4E+00

Qu-

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Tracer

Yield

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MDC

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Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\ledd\Fead\W05121.Edd, h:\Reportdb\ledd\Fead\W05121.Edd

Lab Sample Id: JPNH01CS

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BS

Collection Date: 02/09/2007 08:27

Sample On Date:

Received Date: 02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp
	MW6-SBB-A19981								BJ	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7050402	Uranium	3.41E+01	ug/L	4.1E+00		8.15E-02		3.52E+01	UTOT_KPA	2.57E-02	03/20/2007			75	D
BS	7440-61-1			4.1E+00				96.9		ML	15:20			125	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

12

Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\ledd\Fead\VRad\W05121.Edd, h:\Reportdb\ledd\Fead\VRad\34821.Edd

Lab Sample Id: JPNH01DS

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BS

34821

Collection Date: 02/09/2007 08:27

Sample On Date:

Received Date: 02/09/2007

SAF Nbr Contract Nbr
MW6-SBB-A19981

Test User

Case Nbr

SAS Nbr

Suffix

Decant

Distilled Volume

File Id

FSuffix RTyp
BK HBatch # /
Qc Type
7050402 Uranium
BS 7440-61-1Result/
Orig Rst
3.47E+00Unit
ug/L
Tot/Cnt
Uncert 2S
3.5E-01
3.5E-01Qu-
al
MDC
8.19E-02Tracer
YieldSpk Conc/
%Rec
3.52E+00
98.4Analy
Method
UTOT_KPAAliq
Size/
2.56E-02
MLDate/Time
Analyzed
03/20/2007
15:22RPD/
UCL
RER/
UCLLCS
LCL/UCL Typ
75 D
125

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

13

Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VA\Rad\W05121.Edd, h:\Reportdb\edd\Fead\VA\Rad\34821.Edd

Lab Sample Id: JPNH21CS

NA

Client Id:

Matrix: WATER

34821

Collection Date: 02/15/2007 10:31

Sample On Date:

Moisture/Solids%*:

QC Type: BS

Received Date: 02/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BM	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Concl/ %Rec	Analy Method	Aliq Size/ TC99_SEP_LS	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Type
7050405	TC-99	4.67E+02	pCi/L	3.3E+01		1.02E+01	100.0	5.40E+02			03/07/2007			70	D
BS	14133-76-7			1.2E+01				86.6		L	22:19			130	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

14

Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W05121.Edd, h:\Reportdb\edd\Fead\VRad\34821.Edd

Lab Sample Id: JPNH31CS

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BS

Collection Date: 02/09/2007 08:27

Sample On Date:

Received Date: 02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
									BO	H					
7050408	MW6-SBB-A19981														
BS	14133-76-7														
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7050408	TC-99	5.04E+02	pCi/L	3.5E+01	9.98E+00	100.0	5.36E+02	94.0	TC99_ETVDSK	1.274E-01	03/03/2007	70	70	70	D
				1.3E+01						L	14:49			130	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

15

Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Feed\IVRad\W05121.Edd, h:\Reportdb\edd\Feed\IVRad\34821.Edd

Lab Sample Id: JPNH51CS

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BS

Collection Date: 02/12/2007 12:39

Sample On Date:

Received Date: 02/12/2007

SAF Nbr Contract Nbr
MW6-SBB-A19981

Test User Case Nbr SAS Nbr Suffix Distilled Volume File Id

FSuffix RTyp
BQ H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7050417	H-3	2.37E+03	pCi/L	2.4E+02		2.98E+02	100.0	2.72E+03	906.0_H3_LSC	5.00E-03	03/13/2007			70	D
BS	10028-17-8			2.0E+02				87.0		L	03:32			130	

STL Richland

rptFeedRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

16

Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd

Lab Sample Id: JPNH51EM

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BS

Collection Date: 02/12/2007 12:39

Sample On Date:

Received Date: 02/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType				
	MW6-SBB-A19981								BS	H				
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7050417 BS	H-3 10028-17-8	2.63E+03	pCi/L	2.5E+02 2.1E+02		3.03E+02	100.0	2.72E+03 96.7	906.0_H3_LSC	5.00E-03 L 03/13/2007 18:30			70 130	D

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

17

Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\I\Rad\W05121.Edd, h:\Reportdb\edd\Fead\I\Rad\34821.Edd

Lab Sample Id: JPNJF1CS

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BS

34821

WATER

Collection Date: 02/12/2007 11:36

Sample On Date:

Received Date: 02/12/2007

Batch # / Qc Type	Analyl/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ	FSuffix	RTyp
7050420	CO-60	3.62E+01	pCi/L	9.9E+00		4.33E+00		3.76E+01	GAMMALL_GS	2.0028E+00	03/15/2007			70	D		
BS	10198-40-0			9.9E+00				96.2		L	13:38			130			
7050420	CS-137	2.83E+01	pCi/L	6.8E+00		5.21E+00		2.49E+01	GAMMALL_GS	2.0028E+00	03/15/2007			70	D		
BS	10045-97-3			6.8E+00				114.0		L	13:38			130			
7050420	EU-152	6.33E+01	pCi/L	1.7E+01	U	2.47E+01		7.63E+01	GAMMALL_GS	2.0028E+00	03/15/2007			70	D		
BS	14683-23-9			1.7E+01				82.9		L	13:38			130			

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

/8

Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Feed\VRad\W05121.Edd, h:\Reportdb\edd\Feed\VRad\34821.Edd

Lab Sample Id: JPNJJ1CS

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BS

34821

WATER

Collection Date: 02/12/2007 12:37

Sample On Date:

Received Date: 02/12/2007

SAF Nbr		Contract Nbr		Test User		Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix		RTyp	
		MW6-SBB-A19981										BW		H	
Batch # /	Analyt/	Result/	Tot/Cnt	Qu-	Tracer										
Qc Type	CAS#	Orig Rst	Uncert 2S	al	Yield				Analy	Aliq	Date/Time	RPD/	RER/	LCS	R
7050422	PU-239	4.45E+00	1.0E+00		MDC				Method	Size/	Analyzed	UCL	UCL	LCL/UCL	Typ
BS	PU-239/240		8.4E-01		1.89E-01	85.9		4.50E+00	PUISO_PLATE	2.015E-01	03/07/2007			70	D
								98.8		L	07:13			130	

STL Richland

rptFeedRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

19

Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd

Lab Sample Id: JPNJM1CS

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BS

34821

Collection Date: 02/12/2007 12:37

Sample On Date:

Received Date: 02/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								BY	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7050424	I-129L	7.68E+00	pCi/L	1.1E+00		3.97E-01	95.5	9.93E+00	1129LL_SEP_L	3.8942E+00	03/13/2007			70	D
BS	15046-84-1			1.1E+00				77.3		L	17:30			130	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

20

Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Feed\W05121.Edd, h:\Reportdb\edd\Feed\W05121.Edd

Lab Sample Id: JPNJR1CS

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: BS

34821

WATER

Collection Date: 02/12/2007 12:37

Sample On Date:

Received Date: 02/12/2007

SAF Nbr Contract Nbr
MW6-SBB-A19981

Test User

Case Nbr

SAS Nbr

Suffix

Decant

Distilled Volume

File Id

FSuffix RTyp
CA HBatch # /
Qc Type
7050426 SR-90
BS 10098-97-2Result/
Orig Rst
1.34E+01Unit
pCi/L 2.1E+00
7.1E-01Tot/Cnt
Uncert 2S
4.93E-01MDC
81.4Tracer
Yield
1.35E+01
99.1Spk Conc/
%RecAnaly
Method
SRIISO_SEP_P 1.0031E+00 03/11/2007
LAllq
Size/
1.0031E+00 03/11/2007
09:19Date/Time
AnalyzedRPD/
UCL
RER/
UCL
LCS
LCL/UCL
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130
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STL Richland

rptFeedRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

21

Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\Rad\W05121.Edd, h:\Reportdb\edd\Fead\Rad\34821.Edd

Lab Sample Id: JPNJV1CS

Sdg/Rept Nbr: W05121 34821

Collection Date: 02/13/2007 08:59

Client Id: NA

Matrix: WATER

Sample On Date:

Moisture/Solids%*: BS

QC Type: BS

Received Date: 02/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
	MW6-SBB-A19981								CC	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS	LCL/UCL	R Typ
7050428	ALPHA	2.43E+01	pCi/L	6.5E+00		9.97E-01	100.0	2.28E+01	9310_ALPHA	2.00E-01	03/23/2007			70		D
BS	12587-46-1			3.2E+00				106.3		L	18:51			130		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

22

Thursday, March 29, 2007

STL Richland QC Control Sample Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd

Lab Sample Id: JPNJW1CS

Client Id: NA

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

34821

Collection Date: 02/14/2007 10:50

Sample On Date:

Received Date: 02/14/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
	MW6-SBB-A19981								CE	H					
Batch # / Qc Type	Analyst/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7050430 BS	BETA 12587-47-2	2.34E+01	pCi/L	3.9E+00 2.4E+00		2.52E+00	100.0	2.28E+01 102.4	9310__ALPHAB	1.984E-01	03/23/2007 17:27			70 130	D

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

23

Thursday, March 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05121.Edd, h:\Reportdb\edd\Fead\VRad\34821.Edd

Lab Sample Id: JPAPP1ER

Client Id: B1M870

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: DUP

Collection Date: 02/09/2007 08:27

Sample On Date:

Received Date: 02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-002	MW6-SBB-A19981								AV	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ ML	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCU/UCL	R Typ
7050402	Uranium	2.50E+02	ug/L	3.0E+01		8.32E-02			UTOT_KPA	2.52E-02	03/20/2007 15:32	1.0	0.1		D
DUP	7440-61-1	2.52E+02		3.0E+01								20.0	3		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

24

Thursday, March 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\Rad\W05121.Edd, h:\Reportdb\edd\Fead\Rad\34821.Edd

Lab Sample Id: JPAPP1FR

Client Id: B1M870

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: DUP

Collection Date: 02/09/2007 08:27

Sample On Date:

Received Date: 02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RTyp					
W07-002	MW6-SBB-A19981								AW	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Type
7050408	TC-99	1.12E+04	pCi/L	6.7E+02		1.03E+01	100.0		TC99_ETVDSK	1.251E-01	03/02/2007	2.6	0.6		D
DUP	14133-76-7	1.09E+04		5.8E+01						L	23:12	20.0	3		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

25

Thursday, March 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd

Lab Sample Id: JPDCV1DR

Client Id: B1M951

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: DUP

Collection Date: 02/12/2007 12:39

Sample On Date:

Received Date: 02/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType						
W07-002	MW6-SBB-A19981								AY	H						
Batch # / Qc Type	Analvt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt	Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7050417	H-3	1.06E+03	pCi/L	1.8E+02	1.6E+02	2.99E+02	100.0	906.0_H3_LSC	5.00E-03	03/13/2007	10:20	5.4	0.4	0.4		D
DUP	10028-17-8	1.01E+03														

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Thursday, March 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLR

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\FeadIV\Rad\W05121.Edd, h:\Reportdb\edd\FeadIV\Rad\34821.Edd

Lab Sample Id: JPD31GR

Client Id: B1M7H8

Moisture/Solids%*:
S07-002

Sdg/Rept Nbr: W05121

34821

Matrix: WATER

Collection Date: 02/12/2007 11:36

QC Type: DUP

Sample On Date:

Received Date: 02/12/2007

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/ L	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Type
7050420 DUP	BE-7	-1.43E+01	pCi/L	2.6E+01	U	4.49E+01			GAMMALL_GS	1.9728E+00	03/15/2007	0.0	0.8		D
7050420 DUP	13966-02-4	2.08E-01	pCi/L	2.6E+01		4.71E+00			GAMMALL_GS	1.9728E+00	03/15/2007	20.0	3		D
7050420 DUP	CO-60	6.02E+01	pCi/L	1.2E+01		5.72E+00			GAMMALL_GS	1.9728E+00	03/15/2007	1.5	0.1		D
7050420 DUP	10198-40-0	6.11E+01	pCi/L	1.2E+01		5.05E+00			GAMMALL_GS	1.9728E+00	03/15/2007	20.0	3		D
7050420 DUP	CS-134	-2.33E-01	pCi/L	3.2E+00	U	1.07E+01			GAMMALL_GS	1.9728E+00	03/15/2007	20.0	3		D
7050420 DUP	13967-70-9	-1.63E-01	pCi/L	3.2E+00	U	1.37E+01			GAMMALL_GS	1.9728E+00	03/15/2007	20.0	3		D
7050420 DUP	CS-137	9.10E-01	pCi/L	2.6E+00	U	7.89E+00			GAMMALL_GS	1.9728E+00	03/15/2007	128.7	1.8		D
7050420 DUP	10045-97-3	4.19E+00	pCi/L	2.6E+00	U	9.11E+01			GAMMALL_GS	1.9728E+00	03/15/2007	20.0	3		D
7050420 DUP	EU-152	1.47E+00	pCi/L	5.8E+00	U	4.37E+01			GAMMALL_GS	1.9728E+00	03/15/2007	70.7	0.4		D
7050420 DUP	14683-23-9	3.07E+00	pCi/L	5.8E+00	U	1.37E+01			GAMMALL_GS	1.9728E+00	03/15/2007	20.0	3		D
7050420 DUP	EU-154	7.18E-01	pCi/L	6.8E+00	U	7.89E+00			GAMMALL_GS	1.9728E+00	03/15/2007	0.0	0.4		D
7050420 DUP	15585-10-1	-1.34E+00	pCi/L	6.8E+00	U	9.11E+01			GAMMALL_GS	1.9728E+00	03/15/2007	20.0	3		D
7050420 DUP	EU-155	6.54E-01	pCi/L	4.4E+00	U	9.11E+01			GAMMALL_GS	1.9728E+00	03/15/2007	102.6	0.4		D
7050420 DUP	14391-16-3	2.03E+00	pCi/L	4.4E+00	U	4.37E+01			GAMMALL_GS	1.9728E+00	03/15/2007	20.0	3		D
7050420 DUP	K-40	-6.44E+01	pCi/L	4.2E+01	U	9.55E+00			GAMMALL_GS	1.9728E+00	03/15/2007	0.0	1.4		D
7050420 DUP	13966-00-2	-2.40E+01	pCi/L	4.2E+01	U	9.55E+00			GAMMALL_GS	1.9728E+00	03/15/2007	20.0	3		D
7050420 DUP	RU-106	1.30E+01	pCi/L	2.2E+01	U	9.55E+00			GAMMALL_GS	1.9728E+00	03/15/2007	675.0	1.3		D
7050420 DUP	13967-48-1	-7.04E+00	pCi/L	2.2E+01	U	9.55E+00			GAMMALL_GS	1.9728E+00	03/15/2007	20.0	3		D
7050420 DUP	SB-125	-2.75E+00	pCi/L	5.5E+00	U	9.55E+00			GAMMALL_GS	1.9728E+00	03/15/2007	6551.5	1.5		D
7050420 DUP	14234-35-6	2.92E+00	pCi/L	5.5E+00	U	9.55E+00			GAMMALL_GS	1.9728E+00	03/15/2007	20.0	3		D

SAF Nbr Contract Nbr
S07-002 MW6-SBB-A19981

Test User Case Nbr SAS Nbr Suffix Distilled Volume File Id FSuffix RType
AZ H

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual - Analyte was found in the associated laboratory blank above the MDC.

Thursday, March 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd

Lab Sample Id: JPDMR1ER

Client Id: B1M7F9

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: DUP

Collection Date: 02/12/2007 12:37

Sample On Date:

Received Date: 02/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
S07-002	MW6-SBB-A19981								BA	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Type
7050422	PU-238	0.00E+00	pCi/L	9.4E-02	U	2.22E-01	75.6		PUISO_PLATE	1.984E-01	03/06/2007	200.0	0.4		D
DUP	13981-16-3	2.97E-02		9.4E-02						L	19:04	20.0	3		
7050422	PU-239	-9.25E-03	pCi/L	9.4E-02	U	2.21E-01	75.6		PUISO_PLATE	1.984E-01	03/06/2007	0.0	0.		D
DUP	PU-239/240	-7.44E-03		9.4E-02						L	19:04	20.0	3		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual - Analyte was found in the associated laboratory blank above the MDC.

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Thursday, March 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W05121.Edd, h:\Reportdb\edd\Fead\VRad\34821.Edd

Lab Sample Id: JPDMR1FR

Client Id: B1M7F9

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: DUP

Collection Date: 02/12/2007 12:37

Sample On Date:

Received Date: 02/12/2007

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7050424	I-129L	5.04E+00	pCi/L	7.4E-01		3.55E-01	93.8		I129LL_SEP_L	3.8784E+00	03/13/2007	17.3	1.5		D
DUP	15046-84-1	4.24E+00		7.4E-01						L	13:57	20.0	3		

SAF Nbr Contract Nbr
S07-002 MW6-SBB-A19981

Test User Decant Distilled Volume File Id

FSuffix RTyp
BB H

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
B Qual- Analyte was found in the associated laboratory blank above the MDC.

29

Thursday, March 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\IVRad\W05121.Edd, h:\Reportdb\edd\Fead\IVRad\34821.Edd

Lab Sample Id: JPDMR1GR

Client Id: B1M7F9

Sdg/Rept Nbr: W05121

34821

Collection Date: 02/12/2007 12:37

Moisture/Solids%*:

Matrix: WATER

QC Type: DUP

WATER

Sample On Date:

Received Date: 02/12/2007

SAF Nbr
S07-002Contract Nbr
MW6-SBB-A19981

Test User

Case Nbr

SAS Nbr

Suffix

Decant

Distilled Volume

File Id

FSuffix RType
BC HBatch # /
Qc TypeAnalyt/
CAS#Result/
Orig RstUnit
pCi/LTot/Cnt
Uncert 2SQu-
al

MDC

Tracer
YieldSpk Conc/
%RecAnaly
MethodAliq
Size/Date/Time
AnalyzedRPD/
UCLRER/
UCLLCS
LCL/UCLR
Type

7050426

SR-90

6.13E-01

4.7E-01

U

9.17E-01

50.6

SRISO_SEP_P

9.007E-01

03/11/2007

11.0

0.2

20.0

3

D

DUP

10098-97-2

5.49E-01

4.6E-01

L

09:19

20.0

3

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Thursday, March 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\VRad\W05121.Edd, h:\Reportdb\edd\Fead\VRad\34821.Edd

Lab Sample Id: JPHEX1FR

Sdg/Rept Nbr: W05121

34821

Collection Date: 02/13/2007 08:59

Client Id: B1M9B1

Matrix: WATER

WATER

Sample On Date:

Moisture/Solids%*:

QC Type: DUP

Received Date: 02/13/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
W07-002	MW6-SBB-A19981								BE	H					
Batch # /	Analyt/	Result/	Unit	Tot/Cnt	Qu-	MDC	Tracer	Spk Conc/	Analy	Aliq	Date/Time	RPD/	RER/	LCS	R
Qc Type	CAS#	Orig Rst	pCi/L	Uncert 2S	al		Yield	%Rec	Method	Size/	Analyzed	UCL	UCL	LCL/UCL	Type
7050428	ALPHA	1.48E+00		1.4E+00	U	2.16E+00	100.0		9310_ALPHA	1.792E-01	03/23/2007	17.7	0.2		D
DUP	12587-46-1	1.24E+00		1.3E+00						L	16:57	20.0	3		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

3/

Thursday, March 29, 2007

STL Richland QC Duplicate Report

Lab Code: STLRL

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd

Lab Sample Id: JPM1DG1DR Sdg/Rept Nbr: W05121 34821 Collection Date: 02/15/2007 10:31
 Client Id: B1M854 Matrix: WATER WATER Sample On Date:
 Moisture/Solids%*: QC Type: DUP Received Date: 02/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
W07-002	MW6-SBB-A19981								BG	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Type
7050405	TC-99	7.87E+03	pCi/L	4.7E+02		1.05E+01	100.0		TC99_SEP_LS	1.255E-01	03/07/2007	15.2	3.9		D
DUP	14133-76-7	9.16E+03		4.9E+01						L	17:06	20.0	3		

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Thursday, March 29, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05121.Edd, h:\Reportdb\edd\Fead\VRad\34821.Edd

Lab Sample Id: JPAPR1DW

Client Id: B1M902

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: MS

34821

WATER

Collection Date: 02/09/2007 11:51

Sample On Date:

Received Date: 02/09/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
W07-002	MW6-SBB-A19981								AX	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Aliq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Type
7050408	TC-99	3.49E+03	pCi/L	2.7E+02		1.04E+01	100.0	3.67E+03	TC99_ETVDSK	1.247E-01	03/03/2007			60	D
MS	14133-76-7			3.7E+01				95.1		L	01:17			140	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Thursday, March 29, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLR

FormNbr: R FormatType: FEAD VersionNbr: 05 File Name: h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd, h:\Reportdb\edd\Fead\W05121.Edd

Lab Sample Id: JPDMMW1GW

Client Id: B1M7H7

Collection Date: 02/12/2007 11:36

Moisture/Solids%*: Matrix: WATER Sdg/Rept Nbr: W05121 34821 Sample On Date: Received Date: 02/12/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType
S07-002	MW6-SBB-A19981								BD	H

Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt Uncert 2S	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Allq Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Type
7050402	Uranium	3.31E+01	ug/L	5.2E+00		8.25E-02		3.55E+01	UTOT_KPA	2.54E-02	03/20/2007			60	D
MS	7440-61-1			5.2E+00				93.2		ML	15:41			140	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.
 J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).
 B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Thursday, March 29, 2007

STL Richland Qc Matrix Spike Report

Lab Code: STLRL

FormNbr: R

FormatType: FEAD

VersionNbr: 05

File Name: h:\Reportdb\edd\Fead\VRad\W05121.Edd, h:\Reportdb\edd\Fead\VRad\34821.Edd

Lab Sample Id: JPMDH1EW

Client Id: B1M8L2

Moisture/Solids%*:

Sdg/Rept Nbr: W05121

Matrix: WATER

QC Type: MS

Collection Date: 02/15/2007 12:05

Sample On Date:

Received Date: 02/15/2007

SAF Nbr	Contract Nbr	Test User	Case Nbr	SAS Nbr	Suffix	Decant	Distilled Volume	File Id	FSuffix	RType					
W07-002	MW6-SBB-A19981								BH	H					
Batch # / Qc Type	Analyt/ CAS#	Result/ Orig Rst	Unit	Tot/Cnt	Qu- al	MDC	Tracer Yield	Spk Conc/ %Rec	Analy Method	Ally Size/	Date/Time Analyzed	RPD/ UCL	RER/ UCL	LCS LCL/UCL	R Typ
7050405 TC-99		2.93E+03	pCi/L	2.3E+02	1.02E+01	100.0	3.59E+03	81.6	TC99_SEP_LS	1.265E-01	03/07/2007 19:11			60	D
MS	14133-76-7			3.3E+01						L				140	

STL Richland

rptFeadRadEdd v3.68

U Qual - Analyzed for, but the result is less than the Mdc or gamma scan did not identify the nuclide.

J Qual - No U qualifier has been assigned and the result is below the Reporting Limit (CRDL).

B Qual- Analyte was found in the associated laboratory blank above the MDC.

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Lot No., Due Date: J7B130298; 03/29/2007
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 7050422; RPUISO Pulso by ALP
 SDG, Matrix: W05121; WATER

8.0	Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01	The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02	Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03	Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04	The Correct Tracer and QC Vials Where Used in the Samples OK	Yes	No	N/A
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06	At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07	The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09	Method Blank is within Control Limits. OK	Yes	No	N/A
8.1	Comments:			
8.11	Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13	QAS Specified Duplicate Equation Value within Control Limits. RPD > UCL : 20.0 => JPDMR1AE PU-238 200.0 (RPD) <i>Batch < MVA ok PA 3-8-07</i>	Yes	No	N/A
8.14	LCS within Control Limits. OK	Yes	No	N/A
8.15	MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16	MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17	Tracer within Control Limits. OK	Yes	No	N/A
8.18	Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19	Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2	Comments:			
8.21	Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22	Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK	Yes	No	N/A
8.23	Result <= Action Level, when Defined. OK: No Action Level Found => PU-238 PU-239 OK: No Callin Level Found => PU-238 PU-239	Yes	No	N/A
8.24	Result + 3s >= 0, Not Too Negative. OK	Yes	No	N/A

8.25 Counting Spectrum are within FWHM Limits. FWHM > maxFWHM => JPNJJ1AC PU-239 49>0 Q:V1	Yes No N/A <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.26 Instruments have Current Calibrations.	Yes No N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.27 Correct Count Library Used. Library Not Specified => JPDMR1AC I:[NUC_LIBR]AR_PU Q: JPDMR1AE I:[NUC_LIBR]AR_PU Q: JPNJJ1AA I:[NUC_LIBR]AR_PU Q: JPNJJ1AC I:[NUC_LIBR]AR_PU Q:	Yes No N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes No N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes No N/A <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8.3 Comments:	
8.31 Results Blank Subtracted as Appropriate. OK	Yes No N/A <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

First Level Review

Pam Anderson

Date

3-8-07

STL Richland

OAS RADCALCv4.8.26

STL RICHLAND

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7050422
W05121

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sheryl A. Adams

Date: *3-13-07*

Lot No., Du Date: J7B150271,J7B150278; 03/30/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7050428; RALPHA-A Alpha by GPC-Am
SDG, Matrix: W05121; WATER

8.0 Correction: Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Were Used in the Samples OK	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used Analysis Volume => JPHEX1AA 178.80<200.00 JPHFH1AA 179.60<200.00 Q:VB	Yes	No	N/A
8.07 The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPE)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. No Matrix Spike Samples (MS) found in Batch!	Yes	No	N/A
8.17 Tracer within Control Limits. OK	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) OK	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JPHGJ1A: ALPHA 1.9E+00 L: 1.7E+00	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => ALPHA OK; No Gallin Level Found => ALPHA	Yes	No	N/A
8.24 Result + 3s >= 0, Not Too Negative. OK	Yes	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used.	Yes	No	N/A
No Count Library found in Batch Data!			✓
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate.	Yes	No	N/A
OK	✓		

First Level Review

Lisa Antonson

Date

3/27/07

STL Richland

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7050428

W05121

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sheryl A. Adams

Date: 3-27-07

Lot No., Date: J7B150271, J7B150278, J7B150285; 03/30/2007

Client, Site: 384868; PGW 615 HANFORD HANFORD

QC Batch No., Method Test: 7050430; RBETA-SR Beta by GPC-Sr/Y

SDG, Matrix: W05121; WATER

8.0	Correction Calculation Protocol Used.	OK	Yes	No	N/A
8.01	The Appropriate Methods Were Used To Analyze the Samples	OK	✓		
8.02	Final Results Are in the Appropriate Activity Units	OK	✓		
8.03	Batch Contains the Required QC Appropriate for the Method	OK	✓		
8.04	The Correct Tracer and QC Vials Were Used in the Samples	OK	✓		
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample	OK	✓		
8.06	At Least the Minimum Sample Volume Was Used	Analysis Volume => JPHFH1AC 174.20<200.00 JPHHH1AA 161.90<200.00 Q:VB	✓		
8.07	The Correct Count Geometry was Used.	OK	✓		
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	OK	✓		
8.09	Method Blank is within Control Limits.	OK	✓		
8.1	Comments:		✓		
8.11	Matrix Blank is within Control Limits.	No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary).	OK	✓		
8.13	QAS Specified Duplicate Equation Value within Control Limits.	RPD > UCL: 20.0=> JPHGJ1AG BETA 22.0 JPHGJ2AG BETA 24.0 (RPD)	✓		
8.14	LCS within Control Limits.	OK	✓		
8.15	MLCS within Control Limits.	No Matrix Spikes (MLCS) found in Batch!	✓		
8.16	MS within Control Limits.	No Matrix Spike Samples (MS) found in Batch!	✓		
8.17	Tracer within Control Limits.	OK	✓		
8.18	Samples are above Minimum Tracer Yield (No Failed Samples)	OK	✓		
8.19	Sample Specific MDC <= CRDL.	OK	✓		
8.2	Comments:		✓		
8.21	Result < Lc, Activity Not Detected, U Flag.	No Limit Specified!	Yes	No	N/A
8.22	Result < Mdc, Activity Not Detected, U Flag.	Batch Positive Result => JPHEX1A: BETA 9.1E+01 L:2.8E+00 JPHFA1C: BETA 2.8E+02 L:2.8E+00 JPHFH1C: BETA 5.7E+01 L:3.1E+00 JPHFJ1C: BETA 3.4E+02 L:2.8E+00 JPHGJ1D: BETA 7.5E+00 L:2.8E+00 JPHHE1A: BETA 1.5E+01 L:2.9E+00 JPHHH1A: BETA 2.2E+03 L:3.1E+00 JPHGJ2D: BETA 8.3E+00 L:3.1E+00	✓		

8.23 Result \leq Action Level, when Defined. OK; No Action Level Found \Rightarrow BETA	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
OK; No Callin Level Found \Rightarrow BETA	
8.24 Result + 3s ≥ 0 , Not Too Negative. OK	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
8.26 Instruments have Current Calibrations.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.3 Comments: NCM 10-076418	
8.31 Results Blank Subtracted as Appropriate. OK	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

First Level Review

Ka Cantanzen

Date

3/27/07

STL Richland

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7050430
W05121

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?	✓		
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

See N/Cen

Second Level Review

Sheryl R. Adam

Date:

3-29-07

Clouseau Nonconformance Memo

SEVERN
TRENT
SERVICES

NCM #: **10-09648**
NCM Initiated By: Lisa Antonson
Date Opened: 03/27/2007
Date Closed:

Classification: **Anomaly**
Status: **GLREVIEW**
Production Area: Environmental - Prep
Tests: Beta by GPC-Sr/Y
Lot #'s (Sample #'s): J7B150271 (1,2,3,4),
J7B150278 (1), J7B150285
(1,2,3), J7B190000 (430),
QC Batches: 7050430

Nonconformance: Other (describe in detail)
Subcategory: Other (explanation required)

Problem Description / Root Cause

Name	Date	Description
Lisa Antonson	03/27/2007	1. The dups were out on the first count of this Beta batch. A recount brought them within acceptance limits. 2. The blank for this sample is above 1/2 the CRDL at 2.42. All samples except JPHHN1AA have results that exceed the CRDL, data accepted.

Corrective Action

Name	Date	Corrective Action
Lisa Antonson	03/27/2007	Will monitor blank results.

Client Notification Summary

Client	Project Manager	Notified	Response	How Notified	Note
			<u>Response</u>		<u>Response Note</u>

Quality Assurance Verification

Verified By	Due Date	Status	Notes
		This section not yet completed by QA.	

Approval History

Date Approved	Approved By	Position



STL

Data Review/Verification Checklist
RADIOCHEMISTRY, First Level Review

3/14/2007 8:15:53 AM

Lot No., Due Date: J7B130298; 03/29/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7050426; RSR85907 Sr-85/90 by GPC-7
SDG, Matrix: W05121; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch?

Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits?

Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A

3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units?

Yes No N/A

4.2 Were analysis volumes entered correctly?

Yes No N/A

4.3 Were Yields entered correctly?

Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A

4.5 Were raw counts reviewed for anomalies?

Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted?

Yes No N/A

5.2 Are all required forms filled out?

Yes No N/A

5.3 Was the correct methodology used?

Yes No N/A

5.4 Was transcription checked?

Yes No N/A

5.5 Were all calculations checked at a minimum frequency?

Yes No N/A

5.6 Are worksheet entries complete and correct?

Yes No N/A

6.0 Comments on any No response:

First Level Review

Pam Anderson

Date 3-14-07

STL Richland

QAS RADCALCv4.8.26

STL RICHLAND

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6.8



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7050426
W05121

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sheryl A. Adams

Date:

9-14-07



STL

Data Review/Verification Checklist

RADIOCHEMISTRY, First Level Review

3/19/2007 3:50:50 PM

Lot No., Due Date: J7B120175, J7B130298, J7B150271, J7B180101; 03/26/2007, 03/29/2007, 03/30/2007, 04/02/2007
Client, Site: 384868; PGW 615 HANFORD HANFORD
QC Batch No., Method Test: 7050420; RGAMMA Gamma by GER
SDG, Matrix: W05121; WATER

1.0 COC

1.1 Is the ICOC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch?

Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A

3.3 Are the MS/MSD results, yields, and MDA within contract limits?

Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A

3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units?

Yes No N/A

4.2 Were analysis volumes entered correctly?

Yes No N/A

4.3 Were Yields entered correctly?

Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A

4.5 Were raw counts reviewed for anomalies?

Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted?

Yes No N/A

5.2 Are all required forms filled out?

Yes No N/A

5.3 Was the correct methodology used?

Yes No N/A

5.4 Was transcription checked?

Yes No N/A

5.5 Were all calculations checked at a minimum frequency?

Yes No N/A

5.6 Are worksheet entries complete and correct?

Yes No N/A

6.0 Comments on any No response:

First Level Review

Pam Anderson

Date 3-19-07

STL Richland

QAS_RADCALCv4.8.26

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STL RICHLAND

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

OC Batch Number:

7050420

W05121

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?			
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			
5. Is the LCS recovery with contract acceptance criteria?	✓		✓
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review

Sheryl A. Wilson

Date: 3-20-07

Lot No., Due Date: J7B130298; 03/29/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7050424; RGAMLEPS Gamma by LEPS
SDG, Matrix: W05121; WATER

1.0 COC

1.1 Is the COC page complete; includes all applicable analysis, dates, SOP numbers, and revisions?

Yes No N/A

2.0 QC Batch

2.1 Do the Summary/Detailed Reports include a calculated result for each sample listed on the QC Batch Sheet?

Yes No N/A

2.2 Are the QC appropriate for the analysis included in the batch?

Yes No N/A

2.3 Is the Analytical Batch Worksheet complete; includes as appropriate, volumes, count times, etc?

Yes No N/A

2.4 Does the Worksheets include a Tracer Vial label for each sample?

Yes No N/A

3.0 QC & Samples

3.1 Is the blank results, yield, and MDA within contract limits?

Yes No N/A

3.2 Is the LCS result, yield, and MDA within contract limits?

Yes No N/A

3.3 Are the N S/MSD results, yields, and MDA within contract limits?

Yes No N/A

3.4 Are the duplicate result, yields, and MDAs within contract limits?

Yes No N/A

3.5 Are the sample yields and MDAs within contract limits?

Yes No N/A

4.0 Raw Data

4.1 Were results calculated in the correct units?

Yes No N/A

4.2 Were analysis volumes entered correctly?

Yes No N/A

4.3 Were Yields entered correctly?

Yes No N/A

4.4 Were spectra reviewed/meet contractual requirements?

Yes No N/A

4.5 Were raw counts reviewed for anomalies?

Yes No N/A

5.0 Other

5.1 Are all nonconformances included and noted?

Yes No N/A

5.2 Are all required forms filled out?

Yes No N/A

5.3 Was the correct methodology used?

Yes No N/A

5.4 Was transcription checked?

Yes No N/A

5.5 Were all calculations checked at a minimum frequency?

Yes No N/A

5.6 Are worksheet entries complete and correct?

Yes No N/A

6.0 Comments on any No response:

First Level Review

STL Richland

QAS_RADCALC v4.8.26

Date

3/19/07

STL RICHLAND



STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7050424

W05121

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?			
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			
5. Is the LCS recovery with contract acceptance criteria?	✓		✓
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review

Sherryll A. Adams

Date: 5-20-07

Lot No., Due Date: J7B120175, J7B130255, J7B130298, J7B150271, J7B150278; 03/26/2007, 03/29/2007, 03/30/2007

Client, Site: 384868; PGW

QC Batch No., Method Test: 7050408; RTC99 Tc-99 by LSC

SDG, Matrix: W0512/.....; WATER

8.0	Correction Calculation Protocol Used.	Yes	No	N/A
	OK	✓		
8.01	The Appropriate Methods Were Used To Analyze the Samples	Yes	No	N/A
	OK	✓		
8.02	Final Results Are in the Appropriate Activity Units	Yes	No	N/A
	OK	✓		
8.03	Batch Contains the Required QC Appropriate for the Method	Yes	No	N/A
	OK	✓		
8.04	The Correct Tracer and QC Vials Where Used in the Samples	Yes	No	N/A
	Incorrect Tracer/Vial => JPAPR1AD TCSG<>TCSE Q:V9	3/5/07 ima ✓		
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample	Yes	No	N/A
	OK	✓		
8.06	At Least the Minimum Sample Volume Was Used	Yes	No	N/A
	OK	✓		
8.07	The Correct Count Geometry was Used.	Yes	No	N/A
	Count Geometry => JPNH31AD SVP15/5<>TEVA	✓		
	JPAPP1AC SVP15/5<>TEVA			
	JPAPP1AF SVP15/5<>TEVA			
	JPAPR1AC SVP15/5<>TEVA			
	JPAPR1AD SVP15/5<>TEVA			
	JPAPR1AD SVP15/5<>TEVA			
	JPAP21AC SVP15/5<>TEVA			
	JPAP51AC SVP15/5<>TEVA			
	JPDCV1AC SVP15/5<>TEVA			
	JPDMW1AE SVP15/5<>TEVA			
	JPDM31AE SVP15/5<>TEVA			
	JPHEX1AE SVP15/5<>TEVA			
	JPHFA1AE SVP15/5<>TEVA			
	JPNH31AE SVP15/5<>TEVA			
	JPHFH1AE SVP15/5<>TEVA			
	JPHFJ1AE SVP15/5<>TEVA			
	JPHGJ1AE SVP15/5<>TEVA			
	JPNH31AA SVP15/5<>TEVA			
	JPNH31AC SVP15/5<>TEVA Q:VC			
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	Yes	No	N/A
	OK	✓		
8.09	Method Blank is within Control Limits.	Yes	No	N/A
	OK	✓		
8.1	Comments:			
8.11	Matrix Blank is within Control Limits.	Yes	No	N/A
	No Matrix Blanks (MBIs) found in Batch!			✓
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary).	Yes	No	N/A
	OK	✓		
8.13	QAS Specified Duplicate Equation Value within Control Limits.	Yes	No	N/A
	OK (RPDI)	✓		
8.14	LCS within Control Limits.	Yes	No	N/A
	OK	✓		
8.15	MLCS within Control Limits.	Yes	No	N/A
	No Matrix Spikes (MLCS) found in Batch!			✓
8.16	MS within Control Limits.	Yes	No	N/A
	OK	✓		
8.17	Tracer within Control Limits.	Yes	No	N/A
	No Tracers found in Batch!			✓
8.18	Samples are above Minimum Tracer Yield (No Failed Samples)	Yes	No	N/A
	No Tracers found in Batch!			✓
8.19	Sample Specific MDC <= CRDL.	Yes	No	N/A
	OK	✓		

8.2 Comments:

- | | |
|---|------------|
| 8.21 Result < Lc, Activity Not Detected, U Flag.
No Limit Specified! | Yes No N/A |
| 8.22 Result < Mdc, Activity Not Detected, U Flag.
No Positive Results
OK Calc_IDL Not Calculated | Yes No N/A |
| 8.23 Result <= Action Level, when Defined.
OK; No Action Level Found => TC-99

OK; No Callin Level Found => TC-99 | Yes No N/A |
| 8.24 Result + 3s >=0, Not Too Negative.
OK | Yes No N/A |
| 8.25 Counting Spectrum are within FWHM Limits.
No FWHM found in Batch Data! | Yes No N/A |
| 8.26 Instruments have Current Calibrations. | Yes No N/A |
| 8.27 Correct Count Library Used.
No Count Library found in Batch Data! | Yes No N/A |
| 8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions) | Yes No N/A |
| 8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions) | Yes No N/A |

8.3 Comments:

- | | |
|---|------------|
| 8.31 Results Blank Subtracted as Appropriate.
OK | Yes No N/A |
|---|------------|

First Level Review

Lisa Auterson

Date

3/5/07

STL Richland

QAS_RADCALCv4.8.26

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STL RICHLAND

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7050408
W05121

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sherryl A. Allen

Date: *5-5-07*



STL

Data Review/Verification Checklist RADIOCHEMISTRY, First Level Review

3/9/2007 11:56:02 AM

Lot No., Due Date: J7B180101; 04/02/2007
 Client, Site: 384868; PGW 615HANFORD HANFORD
 QC Batch No., Method Test: 7050405; RTC99 Tc-99 by LSC
 SDG, Matrix: W05121; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JPM1DH1AE TCSG<>TCSE Q:V9	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used OK	Yes	No	N/A
8.07 The Correct Count Geometry was Used. OK	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. OK	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. OK	Yes	No	N/A
8.17 Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK: No Action Level Found => TC-99 OK: No Callin Level Found => TC-99	Yes	No	N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes	No	N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes	No	N/A

8.26 Instruments have Current Calibrations.	Yes	No	N/A
8.27 Correct Count Library Used.	Yes	No	N/A
No Count Library found in Batch Data!			
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later version)	Yes	No	N/A
8.3 Comments:			
8.31 Results Blank Subtracted as Appropriate.	Yes	No	N/A
OK			

First Level Review

Pam Anderson

Date

3-9-07

STL Richland

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7050405
W05121

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review:

Sheryl A. Adams

Date: *5-15-07*

Lot No., Date: J7B120175, J7B130255, J7B130298, J7B150278, J7B180101;

Client, Site: 384868; PGW 615 HANFORD HANFORD

QC Batch No., Method Test: 7050417; RTRITIUM H-3 by LSC

SDG, Matrix: W05121; WATER

8.0	Correction Calculation Protocol Used.	Yes	No	N/A
	OK	✓		
8.01	The Appropriate Methods Were Used To Analyze the Samples	Yes	No	N/A
	OK	✓		
8.02	Final Results Are in the Appropriate Activity Units	Yes	No	N/A
	OK	✓		
8.03	Batch Contains the Required QC Appropriate for the Method	Yes	No	N/A
	OK	✓		
8.04	The Correct Tracer and QC Vials Where Used in the Samples	Yes	No	N/A
	OK	✓		
8.05	Sample was Appropriately Traced Before or After Fractionating the Sample	Yes	No	N/A
	OK	✓		
8.06	At Least the Minimum Sample Volume Was Used	Yes	No	N/A
	Analysis Volume => JPAPR1AA 5.00<10.00	✓		
	JPAP21AA 5.00<10.00			
	JPAP51AA 5.00<10.00			
	JPDCV1AA 5.00<10.00			
	JPDMW1AA 5.00<10.00			
	JPDM31AA 5.00<10.00			
	JPHGJ1AA 5.00<10.00			
	JPMDH1AA 5.00<10.00			
	JPMDJ1AA 5.00<10.00 Q:VB			
8.07	The Correct Count Geometry was Used.	Yes	No	N/A
	Count Geometry => JPNH51AF SVP15/5<>SVP10/10	✓		
	JPNH51AG SVP15/5<>SVP10/10			
	JPNH51AA SVP15/5<>SVP10/10			
	JPNH51AC SVP15/5<>SVP10/10			
	JPAPR1AA SVP15/5<>SVP10/10			
	JPAP21AA SVP15/5<>SVP10/10			
	JPAP51AA SVP15/5<>SVP10/10			
	JPDCV1AA SVP15/5<>SVP10/10			
	JPDCV1AD SVP15/5<>SVP10/10			
	JPDMW1AA SVP15/5<>SVP10/10			
	JPDM31AA SVP15/5<>SVP10/10			
	JPHGJ1AA SVP15/5<>SVP10/10			
	JPNH51AH SVP15/5<>SVP10/10			
	JPNH51AD SVP15/5<>SVP10/10			
	JPNH51AE SVP15/5<>SVP10/10			
	JPMDH1AA SVP15/5<>SVP10/10			
	JPMDJ1AA SVP15/5<>SVP10/10 Q:VC			
8.08	The Sample was Counted for the Minimum Count Time or CRDL was Achieved.	Yes	No	N/A
	OK	✓		
8.09	Method Blank is within Control Limits.	Yes	No	N/A
	OK	✓		
8.1	Comments:			
8.11	Matrix Blank is within Control Limits.	Yes	No	N/A
	OK	✓		
8.12	Method Blank(s) < QAS Limit Value (No B Flag Necessary).	Yes	No	N/A
	OK	✓		
8.13	QAS Specified Duplicate Equation Value within Control Limits.	Yes	No	N/A
	OK (RPD)	✓		
8.14	LCS within Control Limits.	Yes	No	N/A
	OK	✓		
8.15	MLCS within Control Limits.	Yes	No	N/A
	OK	✓		
8.16	MS within Control Limits.	Yes	No	N/A
	No Matrix Spike Samples (MS) found in Batch!	✓		
8.17	Tracer within Control Limits.	Yes	No	N/A
	No Tracers found in Batch!	✓		

8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes No N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes No N/A
8.2 Comments:	
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes No N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. No Positive Results OK Calc_IDL Not Calculated	Yes No N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => H-3 OK; No Callin Level Found => H-3	Yes No N/A
8.24 Result + 3s >=0, Not Too Negative. OK	Yes No N/A
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes No N/A
8.26 Instruments have Current Calibrations.	Yes No N/A
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes No N/A
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes No N/A
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes No N/A
8.3 Comments:	
8.31 Results Blank Subtracted as Appropriate. OK	Yes No N/A

First Level Review

Angela Long

Date

3/14/07

STL Richland

QAS_RADCALC v4.8.26

STL RICHLAND

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

7050417
W05121

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			
5. Is the LCS recovery with contract acceptance criteria?	✓		✓
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

Comments on any "No" response:

Second Level Review

Sheryl A. Alden

Date

3-14-07

Lot No., Due Date: J7B120175,J7B130298,J7B150278,J7B180101; 03/26/2007,03/29/2007,03/30/2007,04/02/2007
Client, Site: 384868; PGW 615HANFORD HANFORD
QC Batch No., Method Test: 7050402; RUNAT UNat by KPA
SDG, Matrix: W05121; WATER

8.0 Correction Calculation Protocol Used. OK	Yes	No	N/A
8.01 The Appropriate Methods Were Used To Analyze the Samples OK	Yes	No	N/A
8.02 Final Results Are in the Appropriate Activity Units OK	Yes	No	N/A
8.03 Batch Contains the Required QC Appropriate for the Method OK	Yes	No	N/A
8.04 The Correct Tracer and QC Vials Where Used in the Samples Incorrect Tracer/Vial => JPNH01AD UNSC<>UNSF Q:V9	Yes	No	N/A
8.05 Sample was Appropriately Traced Before or After Fractionating the Sample OK	Yes	No	N/A
8.06 At Least the Minimum Sample Volume Was Used No Count Analysis Size found in Batch Data!	Yes	No	N/A
8.07 The Correct Count Geometry was Used. No Count Geometry found in Batch Data!	Yes	No	N/A
8.08 The Sample was Counted for the Minimum Count Time or CRDL was Achieved. No Count Duration Field Found in Batch Data!	Yes	No	N/A
8.09 Method Blank is within Control Limits. OK	Yes	No	N/A
8.1 Comments:			
8.11 Matrix Blank is within Control Limits. No Matrix Blanks (MBIs) found in Batch!	Yes	No	N/A
8.12 Method Blank(s) < QAS Limit Value (No B Flag Necessary). OK	Yes	No	N/A
8.13 QAS Specified Duplicate Equation Value within Control Limits. OK (RPD)	Yes	No	N/A
8.14 LCS within Control Limits. OK	Yes	No	N/A
8.15 MLCS within Control Limits. No Matrix Spikes (MLCS) found in Batch!	Yes	No	N/A
8.16 MS within Control Limits. OK	Yes	No	N/A
8.17 Tracer within Control Limits. No Tracers found in Batch!	Yes	No	N/A
8.18 Samples are above Minimum Tracer Yield (No Failed Samples) No Tracers found in Batch!	Yes	No	N/A
8.19 Sample Specific MDC <= CRDL. OK	Yes	No	N/A
8.2 Comments:			
8.21 Result < Lc, Activity Not Detected, U Flag. No Limit Specified!	Yes	No	N/A
8.22 Result < Mdc, Activity Not Detected, U Flag. Batch Positive Result => JPAPP1AD Uranium 2.5E+02 L:7.7E-02 JPDM31AF Uranium 8.7E+00 L:8.4E-02 JPDMW1AF Uranium 9.0E+00 L:8.3E-02 JPHGJ1AF Uranium 6.1E+00 L:8.4E-02 JPMDH1AD Uranium 6.1E+00 L:8.1E-02 JPMDJ1AD Uranium 6.2E+00 L:8.3E-02	Yes	No	N/A
8.23 Result <= Action Level, when Defined. OK; No Action Level Found => Uranium OK; No Callin Level Found => Uranium	Yes	No	N/A

8.24 Result + 3s ≥ 0 , Not Too Negative. OK	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.25 Counting Spectrum are within FWHM Limits. No FWHM found in Batch Data!	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
8.26 Instruments have Current Calibrations.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.27 Correct Count Library Used. No Count Library found in Batch Data!	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
8.28 Instrument Background within Limits at Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.29 Instrument Check Source within Limits at the Time of Counting. (Not Applicable to this version. To be developed in later versions)	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.3 Comments:	
8.31 Results Blank Subtracted as Appropriate. OK	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

First Level Review

Pam Anderson

Date

3-21-07

STL Richland

QAS_RADCALCv4.8.26

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STL RICHLAND

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STL

Data Review Checklist
RADIOCHEMISTRY
Second Level Review

QC Batch Number:

705040Z

W05121

Review Item	Yes (✓)	No (✓)	N/A (✓)
A. Sample Analysis			
1. Are the sample yields within acceptance criteria?	✓		
2. Is the sample Minimum Detectable Activity < the Contract Detection Limit?	✓		
3. Are the correct isotopes reported?	✓		
B. QC Samples			
1. Is the Minimum Detectable Activity for the blank result ≤ the Contract Detection Limit?	✓		
2. Does the blank result meet the Contract criteria?	✓		
3. Is the blank result < the Contract Detection Limit?	✓		
4. Is the blank result > the Contract Detection Limit but the sample result < the Contract Detection Limit?			✓
5. Is the LCS recovery with contract acceptance criteria?	✓		
7. Is the LCS Minimum Detectable Activity ≤ the Contract Detection Limit?	✓		
8. Do the MS/MSD results and yields meet acceptance criteria?			✓
9. Do the duplicate sample results and yields meet acceptance criteria?	✓		
C. Other			
1. Are all Nonconformances included and noted?			✓
2. Are all required forms filled out?	✓		
3. Was the correct methodology used?	✓		
4. Was transcription checked?	✓		
5. Were all calculations checked at a minimum frequency?	✓		
6. Were units checked?	✓		

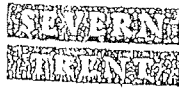
Comments on any "No" response:

Second Level Review:

Sheryl A. Alden

Date: 3-21-07

[illegible]



STL

Sample Check-in List

Date/Time Received: 2/9/07 1420 W05121
Client: PNL SDG #: W05121 NA ☐ SAF #: W07-002 NA ☐
Work Order Number: J7B120175 Chain of Custody #: W07-002-56, 254,
Shipping Container ID: _____ Air Bill #: 263, 262

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature: _____ NA ☒ Vermiculite/packing materials is NA ☒ Well (Dry) ☐
5. Number of samples in shipping container: 4
6. Sample holding times exceeded? NA ☐ Yes ☐ No ☐
7. Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
8. Samples are:
____ in good condition
____ broken
____ leaking
____ have air bubbles
(Only for samples requiring head space)
9. Sample pH taken? NA ☐ pH < 2 ☒ pH > 2 ☒ pH > 3 ☐
10. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes ☒ No ☐
11. Were any anomalies identified in sample receipt? Yes ☐ No ☒
12. Description of anomalies (include sample numbers) _____

Sample Custodian: La Danby Date: 2/9/07 1420

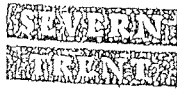
Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

☐ No action necessary; process as is.

Project Manager: _____ Date: _____

LS-023 9/03, Rev 5



STL

Sample Check-in List

Date/Time Received: 2/12/07 1450
Client: PNL SDG # W05121 NA () SAF # W07-002 NA ()
Work Order Number: 77B130255 Chain of Custody # W07-002-430
Shipping Container ID: _____ Air Bill # _____

- 1 Custody Seals on shipping container intact? NA () Yes () No ()
- 2 Custody Seals dated and signed? NA () Yes () No ()
- 3 Chain of Custody record present? Yes () No ()
- 4 Cooler temperature _____ NA () 5 Vermiculite/packing materials is NA () Wet () Dry ()
- 6 Number of samples in shipping container: 1
- 7 Sample holding times exceeded? NA () Yes () No ()
- 8 Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
- 9 Samples are:
____ in good condition
____ broken
____ leaking
____ have air bubbles
(Only for samples requiring head space)
- 10 Sample pH taken? NA () pH < 2 () pH > 2 () pH > 9 ()
- 11 Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes () No ()
- 12 Were any anomalies identified in sample receipt? Yes () No ()
- 13 Description of anomalies (include sample numbers) _____

Sample Custodian: E. J. [Signature] Date: 2/12/07 1450

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client Informed on _____ by _____ Person contacted _____

() No action necessary; process as is.

Project Manager _____ Date _____

LS-023 9/03, Rev 5

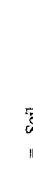



C.O.C. # S07-002-42 Page 1 of 1

J7B/30298
W05121
Dec 03.29.07

Collector	Fluor Hanford F. M. HALL	Contact/Requester Dot Stewart	Telephone No. 509-376-5056	MSIN	FAX
AF No. S07-002		Sampling Origin Hanford Site	Purchase Order/Charge Code		
Project Title SURV. FEBRUARY 2007		Logbook: HWF-N-506-4	Ice Chest No. ERC-96-034 Temp.		
Assigned To (Last)		Method of Shipment Govt. Vehicle	Bill of Lading/Air Bill No.		
Severn Trent Incorporated, Richland			Offsite Property No.		
Protocol SURV		Priority: 45 Days			

POSSIBLE SAMPLE HAZARDS/REMARKS	SPECIAL INSTRUCTIONS	Hold Time	Total Activity Exemption:	Yes	No
* ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not regulable per DOE Order 5400.5 (1990/1993)	All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days. WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.			<input checked="" type="checkbox"/>	<input type="checkbox"/>

[illegible]

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
Relinquished By			FEB 12 2007	Received By			FEB 12 2007	S = Soil SE Sediment SO Solid SL Sludge W Water O Oil A Air
Relinquished By			Date/Time	Received By			Date/Time	DS Drum Solid DL Drum Liquid T Tissue WT Wine L Liquid V Vegetation X Other
Relinquished By			Date/Time	Received By			Date/Time	
FINAL SAMPLE DISPOSITION	Disposal Method (e.g., Return to customer, per lab procedure, used in process)						Disposed By	Date/Time



STL

Sample Check-in List

Date/Time Received: 2/12/07 1455

Client: PUL

SDG #: W05121

NA ()

SAF #: 507-002

NA ()

Work Order Number: J7B130298

Chain of Custody #: 507-002-42,50,62,63

Shipping Container ID: _____

Air Bill #: _____

- 1 Custody Seals on shipping container intact? NA () Yes () No ()
- 2 Custody Seals dated and signed? NA () Yes () No ()
- 3 Chain of Custody record present? Yes () No ()
- 4 Cooler temperature: _____ NA () 5 Vermiculite/packing materials is NA () Wet () Dry ()
- 6 Number of samples in shipping container: 4
- 7 Sample holding times exceeded? NA () Yes () No ()
- 8 Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
____ leaking
____ have air bubbles
(Only for samples requiring head space)
- 9 Samples are:
____ in good condition
____ broken
- 10 Sample pH taken? NA () pH<2 () pH>2 () pH>9 ()
- 11 Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes () No ()
- 12 Were any anomalies identified in sample receipt? Yes () No ()
- 13 Description of anomalies (include sample numbers): _____

Sample Custodian: Er Darby

Date: 2/12/07 1455

Client Sample ID	Analysis Requested	Condition	Comments/Action

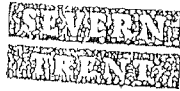
Client Informed on _____ by _____ Person contacted _____

____ No action necessary; process as is.

Project Manager: _____

Date: _____

CS-023 9/03, Rev 5



STL

Sample Check-in List

Date/Time Received 2/13/07 1445

Client PNL

SDG # W05721

NA () DAF # W07-002

Work Order Number: J7B150271

Chain of Custody # W07-002-498, 514, 522, 538

Shipping Container ID: _____

Air Bill # _____

1 Custody Seals on shipping container intact?

NA () Yes ☒ No ()

2 Custody Seals dated and signed?

NA () Yes ☒ No ()

3 Chain of Custody record present?

Yes ☒ No ()

4 Cooler temperature _____ NA ☒

Thermal/ice packing materials in NA ☒ Weigh ()

6 Number of samples in shipping container 4

7 Sample holding times exceeded?

NA () Yes () No ()

8 Samples have:

____ tape
____ custody seals

____ hazard labels
____ appropriate samples labels

9 Samples are
____ in good condition
____ broken

____ leaking
____ have air bubbles
(Only for samples requiring head space)

10 Sample pH taken?

NA () pH < 2 ☒ pH > 2 () pH > 7 ()

11 Sample Location, Sample Collector Listed? *

*For documentation only. No corrective action needed

Yes ☒ No ()

12 Were any anomalies identified in sample receipt?

Yes () No ☒

13 Description of anomalies (include sample numbers) _____

Sample Custodian: Ex Dantey

Date: 2/13/07 1445

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client informed on _____ by _____ Person contacted _____

() No action necessary, process as is.


Project Manager _____

Date _____

LS-023, 9/03, Rev 5

PNNL 578150278 W05121 Due 03/30/07		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				C.O.C. # S07-012-468	
Collector	R. R. FOX	Contact/Requester	Dot Stewart	Telephone No.	MSIN	FAX	Page 1 of 1
SAF No.	S07-012	Sampling Origin	Hanford Site	Purchase Order/Charge Code			
Project Title	SURV. DECEMBER 2006			Ice Chest No.	Temp.		
Shipped To (Lab)	Severn Trent Incorporated, Richland	Method of Shipment	HAZAR. 506-3	Bill of Lading/Air Bill No.			
Protocol				Offsite Property No.			
SURY		Priority: 45 Days					
POSSIBLE SAMPLE HAZARDS/REMARKS				SPECIAL INSTRUCTIONS		Hold Time	
** ** Contains Radioactive Material at concentrations that are not regulated for transportation per 49 CFR but are not releasable per DOE Order 5400.5 (1990/1993)				All Labs except WSCF: Batch all PNNL samples submitted under A, G, I, S, and W 07 SAFs into one SDG, not to exceed SDG closure of 14 days.		Total Activity Exemption: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
				WSCF: Batch all PNNL GW samples submitted into one SDG, daily closure.			

[illegible]

Relinquished By	Print	Sign	Date/Time	Received By	Print	Sign	Date/Time	Matrix *
R.R. FOX			FEB 14 2007	Eric Dwyer	Eric Dwyer		FEB 14 2007	S = Soil DS SE = Sediment DI SO = Solid T SL = Sludge W W = Water I O = Oil V A = Air X = Drum Solid = Drum Liquid = Tissue = Wine = Liquid = Vegetation = Other
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	
Relinquished By			Date/Time	Received By			Date/Time	

FINAL SAMPLE DISPOSITION

Disposal Method (e.g., Return to customer, used in process)

Disposed By

Date/Time



STL

Sample Check-in List

Date/Time Received 2/14/07

Client: PNL

SDG # W05121 NA () SAF # 307-012 NA ()

Work Order Number: J7B150278

Chain of Custody # 307-012-468

Shipping Container ID: _____

Air Bill # _____

1. Custody Seals on shipping container intact? NA () Yes () No ()
2. Custody Seals dated and signed? NA () Yes () No ()
3. Chain of Custody record present? Yes () No ()
4. Cooler temperature: _____ NA () ☒ Vermiculite/packing materials is NA () ☒ Wet () Dry ()
5. Number of samples in shipping container: 1
6. Sample holding times exceeded? NA () Yes () No ()
7. Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
8. Samples are
____ in good condition
____ broken
____ leaking
____ have air bubbles
(Only for samples requiring head space)
9. Sample pH taken? NA () pH < 2 () ☒ pH > 2 () pH > 7 ()
10. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed Yes () No ()
11. Were any anomalies identified in sample receipt? Yes () No ()
12. Description of anomalies (include sample numbers): _____

Sample Custodian: Eric Darcy Date: 2/14/07 1240

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client informed on _____ by _____ Person contacted _____

1 } No action necessary, process as is.

Project Manager _____ Date _____

LS-023, 9/03, Rev 5



STL

Sample Check-in List

Date/Time Received 2/14/07 1445

Client PNL

SDG # W05121

NA ☐

SAF # G07-002

NA ☐

Work Order Number: J7B150285

Chain of Custody # G-07-002, 12, 14, 15

Shipping Container ID: _____

Air Bill # _____

1. Custody Seals on shipping container intact? NA ☐ Yes ☒ No ☐
2. Custody Seals dated and signed? NA ☐ Yes ☒ No ☐
3. Chain of Custody record present? Yes ☒ No ☐
4. Cooler temperature _____ NA ☒ 5. Vermiculite/packing materials is NA ☒ Wet ☐ Dry ☐
6. Number of samples in shipping container: 3
7. Sample holding times exceeded? NA ☒ Yes ☐ No ☐
8. Samples have:
____ tape
____ custody seals
____ hazard labels
____ appropriate samples labels
9. Samples are
____ in good condition
____ broken
____ leaking
____ have air bubbles
(Only for samples requiring head space)
10. Sample pH taken? NA ☐ pH=2 ☒ pH=2 ☐ pH=3 ☐
11. Sample Location, Sample Collector Listed? *
*For documentation only. No corrective action needed. Yes ☒ No ☐
12. Were any anomalies identified in sample receipt? Yes ☐ No ☒
13. Description of anomalies (include sample numbers): _____

Sample Custodian: En Darby

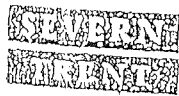
Date: 2/14/07 1445

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client informed on _____ by _____ Person contacted _____
☐ No action necessary; process as is.

Project Manager: _____ Date: _____

LS-012, 9/03, Rev 5



STL

Sample Check-in List

Date/Time Received 2/15/07 1435

Client: PVL

SDG # W05121

NA ()

SAF #

W01-002

NA ()

Work Order Number: J7B180107

Chain of Custody # W07-002, 38, 170, 202

Shipping Container ID: _____

Air Bill # _____

1. Custody Seals on shipping container intact?

NA () Yes (☒) No ()

2. Custody Seals dated and signed?

NA () Yes (☒) No ()

3. Chain of Custody record present?

Yes (☒) No ()

4. Cooler temperature: _____

NA (☒)

5. Vermiculite/packing materials is NA (☒) Wet (☐) Dry (☐)

6. Number of samples in shipping container: 3

7. Sample holding times exceeded?

NA () Yes () No ()

8. Samples have:

_____ tape

_____ custody seals

_____ hazard labels

☒ appropriate samples labels

9. Samples are:

☒ in good condition

_____ broken

_____ leaking

_____ have air bubbles

(Only for samples requiring head space)

10. Sample pH taken?

NA ()

pH < 2 (☒)

pH > 2 ()

pH > 3 ()

11. Sample Location, Sample Collector Listed? *

*For documentation only. No corrective action needed.

Yes (☒) No ()

12. Were any anomalies identified in sample receipt?

Yes () No (☒)

13. Description of anomalies (include sample numbers): _____

Sample Custodian: Lu Donly

Date: 2/15/07 1435

Client Sample ID	Analysis Requested	Condition	Comments/Action

Client informed on _____ by _____ Person contacted _____

() No action necessary, process as is.

Project Manager: _____

Date: _____

LS-023, 9/03, Rev 5

Sample Preparation/Analysis										Balance Id: 1120482733	
3/1/2007 12:04:23 PM										Pipet #:	
384868, Pacific Northwest National Laboratory										Sep1 DT/Tm Tech:	
Pacific Northwest National Lab										Sep2 DT/Tm Tech:	
Analyte: 238Pu, 239Pu, 240Pu, 241Pu, 242Pu, 244Pu, 246Pu, 248Pu, 250Pu, 252Pu, 254Pu, 256Pu, 258Pu, 260Pu, 262Pu, 264Pu, 266Pu, 268Pu, 270Pu, 272Pu, 274Pu, 276Pu, 278Pu, 280Pu, 282Pu, 284Pu, 286Pu, 288Pu, 290Pu, 292Pu, 294Pu, 296Pu, 298Pu, 300Pu, 302Pu, 304Pu, 306Pu, 308Pu, 310Pu, 312Pu, 314Pu, 316Pu, 318Pu, 320Pu, 322Pu, 324Pu, 326Pu, 328Pu, 330Pu, 332Pu, 334Pu, 336Pu, 338Pu, 340Pu, 342Pu, 344Pu, 346Pu, 348Pu, 350Pu, 352Pu, 354Pu, 356Pu, 358Pu, 360Pu, 362Pu, 364Pu, 366Pu, 368Pu, 370Pu, 372Pu, 374Pu, 376Pu, 378Pu, 380Pu, 382Pu, 384Pu, 386Pu, 388Pu, 390Pu, 392Pu, 394Pu, 396Pu, 398Pu, 400Pu, 402Pu, 404Pu, 406Pu, 408Pu, 410Pu, 412Pu, 414Pu, 416Pu, 418Pu, 420Pu, 422Pu, 424Pu, 426Pu, 428Pu, 430Pu, 432Pu, 434Pu, 436Pu, 438Pu, 440Pu, 442Pu, 444Pu, 446Pu, 448Pu, 450Pu, 452Pu, 454Pu, 456Pu, 458Pu, 460Pu, 462Pu, 464Pu, 466Pu, 468Pu, 470Pu, 472Pu, 474Pu, 476Pu, 478Pu, 480Pu, 482Pu, 484Pu, 486Pu, 488Pu, 490Pu, 492Pu, 494Pu, 496Pu, 498Pu, 500Pu, 502Pu, 504Pu, 506Pu, 508Pu, 510Pu, 512Pu, 514Pu, 516Pu, 518Pu, 520Pu, 522Pu, 524Pu, 526Pu, 528Pu, 530Pu, 532Pu, 534Pu, 536Pu, 538Pu, 540Pu, 542Pu, 544Pu, 546Pu, 548Pu, 550Pu, 552Pu, 554Pu, 556Pu, 558Pu, 560Pu, 562Pu, 564Pu, 566Pu, 568Pu, 570Pu, 572Pu, 574Pu, 576Pu, 578Pu, 580Pu, 582Pu, 584Pu, 586Pu, 588Pu, 590Pu, 592Pu, 594Pu, 596Pu, 598Pu, 600Pu, 602Pu, 604Pu, 606Pu, 608Pu, 610Pu, 612Pu, 614Pu, 616Pu, 618Pu, 620Pu, 622Pu, 624Pu, 626Pu, 628Pu, 630Pu, 632Pu, 634Pu, 636Pu, 638Pu, 640Pu, 642Pu, 644Pu, 646Pu, 648Pu, 650Pu, 652Pu, 654Pu, 656Pu, 658Pu, 660Pu, 662Pu, 664Pu, 666Pu, 668Pu, 670Pu, 672Pu, 674Pu, 676Pu, 678Pu, 680Pu, 682Pu, 684Pu, 686Pu, 688Pu, 690Pu, 692Pu, 694Pu, 696Pu, 698Pu, 700Pu, 702Pu, 704Pu, 706Pu, 708Pu, 710Pu, 712Pu, 714Pu, 716Pu, 718Pu, 720Pu, 722Pu, 724Pu, 726Pu, 728Pu, 730Pu, 732Pu, 734Pu, 736Pu, 738Pu, 740Pu, 742Pu, 744Pu, 746Pu, 748Pu, 750Pu, 752Pu, 754Pu, 756Pu, 758Pu, 760Pu, 762Pu, 764Pu, 766Pu, 768Pu, 770Pu, 772Pu, 774Pu, 776Pu, 778Pu, 780Pu, 782Pu, 784Pu, 786Pu, 788Pu, 790Pu, 792Pu, 794Pu, 796Pu, 798Pu, 800Pu, 802Pu, 804Pu, 806Pu, 808Pu, 810Pu, 812Pu, 814Pu, 816Pu, 818Pu, 820Pu, 822Pu, 824Pu, 826Pu, 828Pu, 830Pu, 832Pu, 834Pu, 836Pu, 838Pu, 840Pu, 842Pu, 844Pu, 846Pu, 848Pu, 850Pu, 852Pu, 854Pu, 856Pu, 858Pu, 860Pu, 862Pu, 864Pu, 866Pu, 868Pu, 870Pu, 872Pu, 874Pu, 876Pu, 878Pu, 880Pu, 882Pu, 884Pu, 886Pu, 888Pu, 890Pu, 892Pu, 894Pu, 896Pu, 898Pu, 900Pu, 902Pu, 904Pu, 906Pu, 908Pu, 910Pu, 912Pu, 914Pu, 916Pu, 918Pu, 920Pu, 922Pu, 924Pu, 926Pu, 928Pu, 930Pu, 932Pu, 934Pu, 936Pu, 938Pu, 940Pu, 942Pu, 944Pu, 946Pu, 948Pu, 950Pu, 952Pu, 954Pu, 956Pu, 958Pu, 960Pu, 962Pu, 964Pu, 966Pu, 968Pu, 970Pu, 972Pu, 974Pu, 976Pu, 978Pu, 980Pu, 982Pu, 984Pu, 986Pu, 988Pu, 990Pu, 992Pu, 994Pu, 996Pu, 998Pu, 1000Pu										Prep Tech: BockJ	
Batch: 7050422 WATER pCi/L										CR Analyst, Init/Date	
SEQ Batch Test: None All Tests: 7050402 DHSS, 7050408 FPS5, 7050417 ARS6, 7050420 AWT, 7050422 6DSO, 7050424 BNTB, 7050426 CLTL										Comments:	
Work Order, Lot, Sample Date Time										Count On Off (24hr) Circle	
Total Amt/Unit										Detector Id	
Initial Aliquot Amt/Unit										Count Time Min	
QC Tracer Prep Date										Prep Tech: BockJ	
1 JPDMR-1-AC										200.60g.in	
J7B130298-1-SAMP										PUTC10502	
02/12/2007 12:37										01/23/07.pd	
08/04/06.J										08/04/06.J	
2 JPDMR-1-AE-X										198.40g.in	
J7B130298-1-DUP										PUTC10503	
02/12/2007 12:37										01/23/07.pd	
08/04/06.J										08/04/06.J	
3 JPNJJ-1-AA-B										205.70g.in	
J7B190000-422-BLK										PUTC10504	
02/12/2007 12:37										01/23/07.pd	
08/04/06.J										08/04/06.J	
4 JPNJJ-1-AC-C										201.50g.in	
J7B190000-422-LCS										PUSG0907	
02/12/2007 12:37										02/14/07.pd	
08/04/06.J										08/04/06.J	
Comments: PH < 2.0 ggs 3-1-07										Alpha: Beta:	
Aliquot Shards of bean reduced to 170 mls due to high screening results.										Alpha: Beta:	
Accidentally poured up 200-OL to leave at 200 mls per Lisa A.										Alpha: Beta:	
All Clients for Batch:										Alpha: Beta:	
384868, Pacific Northwest National Laboratory										Pacific Northwest National Lab, SA, 57671	
JPDMLAC-SAMP Constituent List:										Alpha: Beta:	
PU-238 RDL:1										pCi/L	
PU-242 RDL:1										pCi/L	
JPNJJ1AA-BLK:										pCi/L	
PU-238 RDL:1										pCi/L	
PU-242 RDL:1										pCi/L	
JPNJJ1AC-LCS:										pCi/L	
PU-239 RDL:1										pCi/L	
STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2										pCi/L	
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added										pCi/L	
Page 1										pCi/L	
ISV - Insufficient Volume for Analysis										pCi/L	
WO Cnt: 4										pCi/L	
Prep_SamplePrep v4.8.26										pCi/L	

Sample Preparation/Analysis										Balance Id: 1120482733	
3/23/2007 3:53:05 PM										Pipet #:	
38468, Pacific Northwest National Laboratory										Sep1 DT/Tm Tech:	
Pacific Northwest National Lab										Sep2 DT/Tm Tech:	
Analyte: Am-241 curve										Prep Tech: BockJ	
51 CLIENT: HANFORD											
Batch: 7050428 WATER											
PM, Quote: SA, 57671											
SEQ Batch, Test: None All Tests: 7050408 FPS5, 7050420 AWT, 7050428 AZS7, 7050430 BCS8,											
Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:	
1 JPHEX-1-AA	178.80g.in				35.1mg	50	100	172 3	3/23/07	Beta: 3.27E-04 uCi/Sa	
J7B150271-1-SAMP											
02/13/2007 08:59											
2 JPHEX-1-AF-X	179.20g.in				43.3mg	50	100			Beta: 3.27E-04 uCi/Sa	
J7B150271-1-DUP											
02/13/2007 08:59											
3 JPHEX-1-AA	202.50g.in				14.5mg	50	100			Beta: 3.27E-04 uCi/Sa	
J7B150271-2-SAMP											
02/13/2007 11:13											
4 JPHEX-1-AA	179.60g.in				49.4mg	50	100			Beta: 1.30E-04 uCi/Sa	
J7B150271-3-SAMP											
02/13/2007 10:09											
5 JPHEX-1-AA	200.40g.in				26.8mg	50	100			Beta: 5.82E-04 uCi/Sa	
J7B150271-4-SAMP											
02/13/2007 11:54											
6 JPHEX-1-AA	200.40g.in				32.4mg	50	100			Beta: 7.12E-04 uCi/Sa	
J7B150278-1-SAMP											
02/14/2007 10:50											
7 JPHEX-1-AA-B	203.30g.in				0.7mg	50	100			Beta: 1.76E-04 uCi/Sa	
J7B190000-428-BLK											
02/13/2007 08:59											
STL RICHLAND										Alpha:	
Key: In - Initial Amt, fl - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2										Beta:	
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added										Alpha:	
ISV - Insufficient Volume for Analysis										Beta:	
WO Cnt: 7										Alpha:	
Prep_SamplePrep v4.8.26										Beta:	

3/23/2007 3:53:10 PM

Sample Preparation/Analysis

Balance Id:1120482733

AZ Gross Alpha PrpRC5014

Pipet #:

S7 Gross Alpha by GPC using Am-241 curve

AnalyDueDate: 03/30/2007

Sep1 DT/Tm Tech:

Batch: 7050428

pCi/L

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JPNJV-1-ACC	200.00g/in		asd4139		0.5mg	50	10A	1917	3/23/07	90
J7B190000-428-LCS			02/14/07.pd							
			02/09/06.1							

02/13/2007 08:59

AmfRec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments: JPHEX-SAMP *Comments. Aliquots reduced due to weight screen activity. JB 03/06/07"

DH 3/23/2007

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA, 57671

JPHEX1AA-SAMP Constituent List:

ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JPNJV1AA-BLK:					
ALPHA	RDL:3	pCi/L	LCL:	UCL:	RPD:
JPNJV1AC-LCS:					
Am-241	RDL:	pCi/L	LCL:70	UCL:130	RPD:20
JPHEX1AA-SAMP Calc Info:					
Uncert Level (#s): 2	Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
JPNJV1AA-BLK:					
Uncert Level (#s): 2	Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
JPNJV1AC-LCS:					
Uncert Level (#s): 2	Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	

Approved By

Date:

STL Richland
Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

ISV - Insufficient Volume for Analysis

WO Cnt: 8

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Prep_SamplePrep v4.8.26

3/27/2007 10:26:27 AM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

Sample Preparation/Analysis

Balance Id:1120482733

BC Gross Beta PrpRC5014

S8 Gross Beta by GPC using Sr/Y-90 curve

SI CLIENT: HANFORD

AnalyDueDate: 03/30/2007

Batch: 7050430 WATK pCi/L

PM, Quote: SA, 57671

SEQ Batch, Test: None All Tests: 7050408 FPS5, 7050420 AWTa, 7050428 AZS7, 7050430 BCS8,

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JPHEX-1-AC		199.00g.in			71.9mg	100				
J7B150271-1-SAMP										
02/13/2007 08:59										
2 JPHEX-1-AC		200.70g.in			41.8mg	100				
J7B150271-2-SAMP										
02/13/2007 11:13										
3 JPHEX-1-AC		174.20g.in			72.1mg	100				
J7B150271-3-SAMP										
02/13/2007 10:09										
4 JPHEX-1-AC		199.70g.in			51.8mg	100				
J7B150271-4-SAMP										
02/13/2007 11:54										
5 JPHEX-1-AD		200.20g.in			62.9mg	100				
J7B150278-1-SAMP										
02/14/2007 10:50										
6 JPHEX-1-AG-X		201.10g.in			69mg	100				
J7B150278-1-DUP										
02/14/2007 10:50										
7 JPHEX-2-AD										
J7B150278-1-SAMP										
02/14/2007 10:50										

AmtRec: 20ML, 2X500ML, 2XLP #Containers: 5

Scr: Alpha: 9.60E-04 uCi/Sa

Beta: -1.76E-04 uCi/Sa

STL Richland
Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

ICOC v4.8.26

3/27/2007 10:26:29 AM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

Sample Preparation/Analysis

BC Gross Beta PrpRC5014

S8 Gross Beta by GPC using Sr/Y-90 curve

SI CLIENT: HANFORD

AnalyDueDate: 03/30/2007

Batch: 7050430 WATER

pCi/L

PM, Quote: SA, 57671

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

Prep Tech:

Work Order, Lot, Sample Date Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JPHGJ-2-AG-X										
J7B150278-1-DUP										
02/14/2007 10:50										
9 JPHHE-1-AA										
J7B150285-1-SAMP										
02/14/2007 09:44										
10 JPHHH-1-AA										
J7B150285-2-SAMP										
02/14/2007 08:50										
11 JPHHN-1-AA										
J7B150285-3-SAMP										
02/14/2007 07:30										
12 JPNJW-1-AA-B										
J7B190000-430-BLK										
02/14/2007 10:50										
13 JPNJW-1-AC-C										
J7B190000-430-LCS										
02/14/2007 10:50										

STL Richland

Key: in - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 13

ICOC v4.8.26

3/27/2007 10:26:33 AM

Sample Preparation/Analysis

Balance Id:1120482733

BC Gross Beta PrpRC5014

S8 Gross Beta by GPC using Sr/Y-90 curve

SI CLIENT: HANFORD

AnalyDueDate: 03/30/2007

Batch: 7050430

SEQ Batch, Test: None

pCi/L

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments: JPHEX-SAMP "Comments. Aliquots reduced due to weight screen activity. JB 03/06/07"
JPHFH-SAMP "Comments. Aliquot reduced due to high screen results. JB 03/06/07"

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA , 57671

JPHEX1AC-SAMP Constituent List:

BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
UPNJW1AA-BLK:					
BETA	RDL:4	pCi/L	LCL:	UCL:	RPD:
UPNJW1AC-LCS:					
Sr-90	RDL:	pCi/L	LCL:70	UCL:130	RPD:20
JPHEX1AC-SAMP Calc Info:					
Uncert Level (#s): 2	Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
UPNJW1AA-BLK:					
Uncert Level (#s): 2	Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	
UPNJW1AC-LCS:					
Uncert Level (#s): 2	Decay to Sadt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B	

Approved By

Date:

STL RICHLAND

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 3

ISV - Insufficient Volume for Analysis

WO Cnt: 13

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ICOC v4.8.26

Sample Preparation/Analysis

Balance Id:1120482733

3/9/2007 1:52:57 PM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

CL SR-90 Prp/SepRC5006(5071)

TL SR-85 by Nal and Sr-90 by GPC 7 day ingrowth

51 CLIENT: HANFORD

Sep1 DT/Tm Tech: 03/02/2007 13:40,ManisD

AnalDueDate: 03/29/2007

Batch: 7050426 WATER

PM, Quote: SA, 57671

Sep2 DT/Tm Tech: 03/09/2007 09:11,ManisD

SEQ Batch, Test: None

Prep Tech: ,BockJ

Work Order, Lot, Sample Date Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JPMR-1-AD		903.50g.in	SRTB14551		1.5	23.2	100	SA	0947	3/10/07	K
J7B130298-1-SAMP			02/20/07,pd					SA	1009	3/11/07	K
09/02/2007 13:40:51, 09/09/2007											
02/12/2007 12:37			AmtRec: 20ML 4XLP, 2X4LP	#Containers: 7					Scr: Alpha: 1.27E-02 uCi/Sa	1.7E-01L	Beta: -9.96E-04 uCi/Sa
2 JPMR-1-AG-X		900.70g.in	SRTB14552		1.5	23.8	100	SB	0947	3/10/07	K
J7B130298-1-DUP			02/20/07,pd					SB	1009	3/11/07	K
09/02/2007 13:40:51, 09/09/2007											
02/12/2007 12:37			AmtRec: 20ML 4XLP, 2X4LP	#Containers: 7					Scr: Alpha: 1.27E-02 uCi/Sa	1.7E-01L	Beta: -9.96E-04 uCi/Sa
3 JPNJR-1-AA-B		1002.50g.in	SRTB14553		1.5	23.8	100	SC	0947	3/10/07	K
J7B190000-426-BLK			02/20/07,pd					SC	1009	3/11/07	K
09/02/2007 13:40:51, 09/09/2007											
02/12/2007 12:37			AmtRec: 20ML 4XLP, 2X4LP	#Containers: 1					Scr: Alpha: 1.27E-02 uCi/Sa	1.7E-01L	Beta: -9.96E-04 uCi/Sa
4 JPNJR-1-AC-C		1003.10g.in	SRTB14553		1.5	24.5	100	SD	0947	3/10/07	K
J7B190000-426-LCS			02/20/07,pd					SD	1009	3/11/07	K
09/02/2007 13:40:51, 09/09/2007											
02/12/2007 12:37			AmtRec: 20ML 4XLP, 2X4LP	#Containers: 1					Scr: Alpha: 1.27E-02 uCi/Sa	1.7E-01L	Beta: -9.96E-04 uCi/Sa

3/1/2007 9:57:32 AM

Balance Id:1120482733

Pipet #:

DEM

Sample Preparation/Analysis

CL Sr-90 Prp/SepRC5006(5071)

TL Sr-85 by NaI and Sr-90 by GPC 7 day ingrowth

SI CLIENT: HANFORD

Batch: 7050426

WATER

PC/L

PM, Quote: SA, 57671

AnalyDueDate: 03/29/2007

205121

Sep1 DT/Tm Tech: 3/1/07 1:40:06 PM

Sep2 DT/Tm Tech: 3/1/07 9:11:08 PM

Prep Tech: BockJ

CR Analyst, Init/Date

Count On | Off (24hr) Circle

Comments:

Work Order, Lot, Sample Date Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:	
1 JPDMR-1-AD		903.50g.in	SRTB14551	1.146					3"	1553	3/2/07 r	
J7B130298-1-SAMP			02/20/07.pd	0.0084								
			09/11/06.r	0.5806								
			YTA17032									
			EX:1/3/2006									
02/12/2007 12:37			AmtRec: 20ML 4XLP 2X4LP	#Containers: 7								
2 JPDMR-1-AG-X		900.70g.in	SRTB14552	1.092					9"	1155	3/2/07 r	
J7B130298-1-DUP			02/20/07.pd	2.0818								
			09/11/06.r	0.5401								
			YTA17033									
			EX:1/3/2006									
02/12/2007 12:37			AmtRec: 20ML 4XLP 2X4LP	#Containers: 7								
3 JPNJR-1-AA-B		1002.50g.in	SRTB14553	1.720					3"	1656	3/2/07 r	
J7B190000-426-BLK			02/20/07.pd	2.0084								
			09/11/06.r	0.8564								
			YTA17034									
			EX:1/3/2006									
02/12/2007 12:37			AmtRec:	#Containers: 1								
4 JPNJR-1-AC-C		1003.10g.in	SRTG1320	1.703					3"	1752	3/2/07 r	
J7B190000-426-LCS			02/20/07.pd	2.0188								
			09/11/06.r	0.8436								
			YTA17035									
			EX:1/3/2006									
02/12/2007 12:37			AmtRec:	#Containers: 1								

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 4

Prep_SamplePrep v4.8.26

3/1/2007 9:57:34 AM

Sample Preparation/Analysis

Balance Id:1120482733

CL Sr-90 Prp/SepRC5006(5071)

Pipet #:

TL Sr-85 by Nai and Sr-90 by GPC 7 day ingrowth

AnalyDueDate: 03/29/2007

SI CLIENT: HANFORD

Sep1 DT/Tm Tech:

pCi/L

Batch: 7050426

SEQ Batch, Test: None

Sep2 DT/Tm Tech:

Prep Tech: BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Tracer Yield	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
--------------------------------------	-------------------	-----------------------------	------------------------	-----------------	--------------	--------------------	-------------------	----------------	---------------------------------	--------------------------	-----------

Comments: PH 2.093 3-1-07

Aliquots reduced due to high Screening results. 93 3-1-07

All Clients for Batch:

384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA, 57671

UPDMRIAD-SAMP Constituent List:

Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20
UPNJRIAA-BLK:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:	UCL:	RPD:
UPNJRIAC-LCS:											
Sr-85	RDL:	pCi/L	LCL:20	UCL:105	RPD:20	Sr-90	RDL:2	pCi/L	LCL:70	UCL:130	RPD:20

UPDMRIAD-SAMP Calc Info:

Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
UPNJRIAA-BLK:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B
UPNJRIAC-LCS:				
Uncert Level (#s): 2	Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B

Approved By

Date:

STL RICHLAND

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Page 2

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 4

Prep_SamplePrep v4.8.26

Sample Preparation/Analysis

Balance Id: 1120482733

3/2/2007 8:03:07 AM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab
AW Gamma PrPRC5017
TA Gamma by HPGE
5I CLIENT: HANFORD

Pipet #:

Sep1 DT/Tm Tech:

AnalyDueDate: 03/26/2007

Sep2 DT/Tm Tech:

PM, Quote: SA, 57671

Batch: 7050420 WATER pCi/L

SEQ Batch, Test: None

Prep Tech: BockJ

Work Order, Lot, Sample Date Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JPHFJ-1-AD		2000.00g.in								
J7B150271-4-SAMP										
02/13/2007 11:54										
9 JPMDG-1-AA		2005.90g.in								
J7B180101-1-SAMP										
02/15/2007 10:31										
10 JPNJF-1-AA-B		2000.10g.in								
J7B190000-420-BLK										
02/12/2007 11:36										
11 JPNJF-1-AC-C		2002.80g.in								
J7B190000-420-LCS										
02/12/2007 11:36										

Comments: 3A 2.0 3B 3-2-07

All Clients for Batch:									
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA, 57671									
JPAP1AA-SAMP Constituent List:									
Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:
Cs-137	RDL:6.00E+00	pCi/L	LCL:70	UCL:130	RPD:20	Cs-137DA	RDL:6.00E+00	pCi/L	LCL:70
Eu-154	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Eu-155	RDL:0.00E+00	pCi/L	LCL:
K-40	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Sb-125	RDL:0.00E+00	pCi/L	LCL:
JPNJF1AA-BLK:									
Co-60	RDL:0.00E+00	pCi/L	LCL:	UCL:	RPD:	Cs-134	RDL:0.00E+00	pCi/L	LCL:
STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2									
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktalled Added									
ISV - Insufficient Volume for Analysis									
WO Cnt: 11									
Prep_SamplePrep v4.8.26									

3/8/2007 10:11:02 AM

384868, Pacific Northwest National Laboratory ,
Pacific Northwest National Lab

ANALYSED DATE: 03/29/2007 2005121

BATCH: 7050424 WATER

SEQ Batch, Test: None

Sample Preparation/Analysis

BN I-129 Prp/SepRC5025
TB Gamma by LEPD
SI CLIENT: HANFORD

PM, Quote: SA , 57671

PCIL

Balance Id:1120482733

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ, Bostald

Work Order, Lot, Sample Date Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JPDMM-1-AA J7B130298-1-SAMP		3965.60g.in	ITA6099 02/23/07			34.8	100	1536	3/13/07	
02/12/2007 12:37										
AmtRec: 20ML, 4XLP, 2X4LP #Containers: 7										
Scr: Alpha: 1.27E-02 uCi/Sa 1.7E-01L Beta: 9.96E-04 uCi/Sa										
2 JPDMM-1-AF-X J7B130298-1-DUP		3878.40g.in	ITA6100 02/23/07			34.7		1537		
02/12/2007 12:37										
AmtRec: 20ML, 4XLP, 2X4LP #Containers: 7										
Scr: Alpha: 1.27E-02 uCi/Sa 1.7E-01L Beta: 9.96E-04 uCi/Sa										
3 JPDMM-1-AA J7B130298-2-SAMP		3932.60g.in	ITA6101 02/23/07			35.0		1537		
02/12/2007 10:36										
AmtRec: 20ML, 2X4LP #Containers: 3										
Scr: Alpha: 5.33E-04 uCi/Sa Beta: 1.89E-04 uCi/Sa										
4 JPDMM-1-AD J7B130298-3-SAMP		3961.30g.in	ITA6102 02/23/07			35.1		1723	3/13/07	
02/12/2007 11:36										
AmtRec: 20ML, 2X500ML, LP, 3X4LP #Containers: 7										
Scr: Alpha: 1.00E-02 uCi/Sa 2.5E-01L Beta: 2.15E-03 uCi/Sa										
5 JPDMM-1-AD J7B130298-4-SAMP		3932.50g.in	ITA6103 02/23/07			35.9		1724		
02/12/2007 11:36										
AmtRec: 20ML, 2X500ML, LP, 3X4LP #Containers: 7										
Scr: Alpha: 1.18E-02 uCi/Sa 2.1E-01L Beta: 1.16E-03 uCi/Sa										
6 JPNJM-1-AA-B J7B190000-424-BLK		3745.10g.in	ITA6104 02/23/07			35.1		1724		
02/12/2007 12:37										
AmtRec: #Containers: 1										
Scr: Alpha: Beta:										
7 JPNJM-1-AC-C J7B190000-424-LCS		3894.20g.in	ISD0734 12/20/06			38.6		1910		
02/12/2007 12:37										
AmtRec: #Containers: 1										
Scr: Alpha: Beta:										

STL RICHLAND

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

Page 1

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep_SamplePrep v4.8.26

Balance Id:1120482733

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

AnalytDueDate: 03/29/2007

Batch: 7050424

7/13d

SEQ Batch, Test: None

Prep Tech: BockJ

Work Order, Lot, Sample Date/Time	Total Amt/(Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Dish Size	Ppt or Geometry	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
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Comments: PH 2.0 PB 3-8-07

All Clients for Batch:

Pacific Northwest National Lab, SA, 57671

TPDMLAA-SAMP Constituent List:

	RDL:	pci/L	LCL:	UCL:	RPD:
I-129	1.00E+00				

JPNUM1AA-BLK:

I-129	RDL:1.00E+00	pCi/L	LCL:	UCL:	RPD:
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I-125
 ADP: 1.001700
 TPN: TM1AC-ICS:

T-129 RDL:5 PCI/L LCL:70 UCL:130 RPD:20

SECRET

UPDNR1AA~SAMP Calc Info:

Uncert Level (#s) :: 2

JPNJMIAA-BLK:

Uncert Level (#s) : 2

UPNJMLAC-LCS:

Uncert Level (#s): 2

100% 90% 80% 70% 60% 50% 40% 30% 20% 10% 0%

Approved By

Date:

STL Richland

Page 2

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep SamplePrep v4.8.26

3/1/2007 12:31:32 PM

384868, Pacific Northwest National Laboratory
Pacific Northwest National LabFP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
51 CLIENT: HANFORD

AnalyDueDate: 03/26/2007

WATER
pCi/L

Batch: 7050408

PM, Quote: SA, 57671

SEQ Batch, Test: None

Sample Preparation/Analysis

Balance Id: 120482733

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: BockJ

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JPAPP-1-AC J7B120175-1-SAMP 02/09/2007 08:27	125.40g.in	125.40g	AmtRec: 20ML, 2X500ML, LP	#Containers: 4	Scr:	Alpha: 1.82E-06 uCi/Sa	Beta: 7.96E-07 uCi/Sa			
2 JPAPP-1-AF-X J7B120175-1-DUP 02/09/2007 08:27	125.10g.in	125.10g	AmtRec: 20ML, 2X500ML, LP	#Containers: 4	Scr:	Alpha: 1.82E-06 uCi/Sa	Beta: 7.96E-07 uCi/Sa			
3 JPAPR-1-AC J7B120175-2-SAMP 02/09/2007 11:51	125.00g.in	125.00g	AmtRec: 20ML, 500ML, LP	#Containers: 3	Scr:	Alpha: -6.16E-05 uCi/Sa	Beta: 3.10E-04 uCi/Sa			
4 JPAPR-1-AD-S J7B120175-2-MS 02/09/2007 11:51	124.70g.in	124.70g	AmtRec: 20ML, 500ML, LP	#Containers: 3	Scr:	Alpha: -6.16E-05 uCi/Sa	Beta: 3.10E-04 uCi/Sa			
5 JPAP2-1-AC J7B120175-3-SAMP 02/09/2007 10:14	125.70g.in	125.70g	AmtRec: 20ML, 500ML, LP	#Containers: 3	Scr:	Alpha: -4.78E-05 uCi/Sa	Beta: 1.85E-04 uCi/Sa			
6 JPAP5-1-AC J7B120175-4-SAMP 02/09/2007 10:14	125.10g.in	125.10g	AmtRec: 20ML, 500ML, LP	#Containers: 3	Scr:	Alpha: -1.35E-04 uCi/Sa	Beta: 3.91E-04 uCi/Sa			
7 JPDCV-1-AC J7B130255-1-SAMP 02/12/2007 12:39	125.10g.in	125.10g	AmtRec: 20ML, 500ML, LP	#Containers: 3	Scr:	Alpha: -1.35E-04 uCi/Sa	Beta: 3.91E-04 uCi/Sa			

STL RICHLAND

Richland Wa.

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2
pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ISV - Insufficient Volume for Analysis

WO Cnt: 7

Prep_SamplePrep v4.8.26

Sample Preparation/Analysis

Balance Id:120482733

3/1/2007 12:31:34 PM

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
SI CLIENT: HANFORD

Pipet #:

Sep1 DT/Tm Tech:

PM, Quote: SA, 57671

Prep Tech: ,RockJ

Batch: 7050408 WATER pCi/L

SEQ Batch, Test: None

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JPDMMW-1-AE J7B130298-3-SAMP 02/12/2007 11:36	124.90g.in	124.90g	124.90g.in	124.90g				Scr: Alpha: 1.00E-02 uCi/Sa 2.5E-01L Beta: -2.15E-03 uCi/Sa		
9 JPDMM3-1-AE J7B130298-4-SAMP 02/12/2007 11:36	125.10g.in	125.10g	125.10g.in	125.10g				Scr: Alpha: 1.18E-02 uCi/Sa 2.1E-01L Beta: -1.16E-03 uCi/Sa		
10 JPHFX-1-AE J7B150271-1-SAMP 02/13/2007 08:59	125.20g.in	125.20g	125.20g.in	125.20g				Scr: Alpha: 7.29E-04 uCi/Sa Beta: -3.27E-04 uCi/Sa		
11 JPHFA-1-AE J7B150271-2-SAMP 02/13/2007 11:13	126.00g.in	126.00g	126.00g.in	126.00g				Scr: Alpha: -3.67E-04 uCi/Sa Beta: -1.30E-04 uCi/Sa		
12 JPHFH-1-AE J7B150271-3-SAMP 02/13/2007 10:09	126.80g.in	126.80g	126.80g.in	126.80g				Scr: Alpha: -1.89E-04 uCi/Sa Beta: 5.82E-04 uCi/Sa		
13 JPHFJ-1-AE J7B150271-4-SAMP 02/13/2007 11:54	125.50g.in	125.50g	125.50g.in	125.50g				Scr: Alpha: 1.48E-03 uCi/Sa Beta: -7.12E-04 uCi/Sa		
14 JPHGJ-1-AE J7B150278-1-SAMP 02/14/2007 10:50	125.50g.in	125.50g	125.50g.in	125.50g				Scr: Alpha: 9.60E-04 uCi/Sa Beta: -1.76E-04 uCi/Sa		

3/1/2007 12:31:35 PM

Sample Preparation/Analysis

Balance Id:120482733

FP Tc-99 Prp/SepRC5065
S5 Technetium-99 by Liquid Scint
51 CLIENT: HANFORD

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Prep Tech: BockJ

AnalyteDueDate: 03/26/2007

Batch: 7050408

SEQ Batch, Test: None

pCi/L

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
15 JPNH3-1-AA-B			125.40g.in	125.40g		60				
J7B190000-408-BLK										
02/09/2007 08:27			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:
16 JPNH3-1-AC-C			127.40g.in	127.40g	lose2081 02/21/07 pd 01/10/06 r					
J7B190000-408-LCS										
02/09/2007 08:27			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:
17 JPNH3-1-AD-BN										
J7B190000-408-IBLK										
02/09/2007 08:27			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:
18 JPNH3-1-AE-BN										
J7B190000-408-IBLK										
02/09/2007 08:27			AmtRec:	#Containers: 1			Scr:	Alpha:		Beta:

Comments: 3A 220 153-1-07

All Clients for Batch:													
384868, Pacific Northwest National Laboratory Pacific Northwest National Lab, SA , 57671													
JPAPPIAC-SAMP Constituent List:													
TC-99	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20								
JPAPRIAD-MS:													
JPNH31AA-BLK:													
TC-99	RDL:15	pCi/L	LCL:	UCL:	RPD:								
JPNH31AC-LCS:													
TC-99	RDL:15	pCi/L	LCL:70	UCL:130	RPD:20								
STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2													
Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added													
ISV - Insufficient Volume for Analysis										WO Ont: 18			
										Prep_SamplePrep v4.8.26			

FP Tc-99 Prp/SepRC5065
SS5 Technetium-99 by Liquid Scint
51 CLIENT: HANFORD

pCi/L

Prep Tech:

Work Order, Lot, Sample Date	Total Amt /Unit	Total Acidified/Unit	Initial Aliquot Amt/Unit	Adj Aliq Amt (Un-Acidified)	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
UPNH31AD-IBLK:										
TC-99 RDL:15		pCi/L	LCL:	UCL:	RPD:					
UPNH31AE-IBLK:										
TC-99 RDL:15		pCi/L	LCL:	UCL:	RPD:					
UPPAPIAC-SAMP Calc Info:										
Uncert Level (#s): 2		Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B					
UPAPRIAD-MS:										
Uncert Level (#s): 2		Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B					
UPNH31AA-SLK:										
Uncert Level (#s): 2		Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B					
UPNH31AC-LCS:										
Uncert Level (#s): 2		Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B					
UPNH31AD-IBLK:										
Uncert Level (#s): 2		Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B					
UPNH31AE-IBLK:										
Uncert Level (#s): 2		Decay to SaDt: Y	Blk Subt.: N	Sci.Not.: Y	ODRs: B					

Approved By

॥ श्रीगणेशाय नमः ॥

ISV - Insufficient Volume for Analysis

WO Cnt: 18

Prep SamplePrep v4.8.26

STL Richland

Richland Wa.

3/1/2007 12:43:48 PM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

Sample Preparation/Analysis

AM Tc-99 Prp/SepRC5078
S5 Technetium-99 by Liquid Scint
51 CLIENT: HANFORD

Balance Id: 1120482733

Pipet #:

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

AnalytDueDate: 04/02/2007

Batch: 7050405 WATER

PM, Quote: SA, 57671

pCi/L

SEQ Batch, Test: None

Prep Tech: BockJ

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JPMDG-1-AC J7B180101-1-SAMP 02/15/2007 10:31		124.80g.in						
2 JPMDG-1-AD-X J7B180101-1-DUP 02/15/2007 10:31		125.50g.in						
3 JPMDH-1-AC J7B180101-2-SAMP 02/15/2007 12:05		125.80g.in						
4 JPMDH-1-AE-S J7B180101-2-MS 02/15/2007 12:05		126.50g.in						
5 JPMDJ-1-AC J7B180101-3-SAMP 02/15/2007 11:26		127.20g.in						
6 JPNH2-1-AA-B J7B190000-405-BLK 02/15/2007 10:31		127.30g.in						
7 JPNH2-1-AC-C J7B190000-405-LCS 02/15/2007 10:31		126.30g.in						

Sample Preparation/Analysis									
Balance Id:					Pipet #:				
AM Tc-99 Prp/SepRC5078					S5 Technetium-99 by Liquid Scint				
51 CLIENT: HANFORD					Sep1 DT/Tm Tech:				
Batch: 7050405					Sep2 DT/Tm Tech:				
SEQ Batch, Test: None					Prep Tech:				
Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:	
<div> <div>8 JPNH21AD-BN</div> <div>J7B190000-405-1BLK</div> <div> </div> </div>									
<div> <div>02/15/2007 10:31</div> <div>AmtRec: #Containers: 1</div> <div>Alpha: Beta:</div> </div>									
<div> <div>Comments: PA 42.0 3-1-07</div> <div> <div>All Clients for Batch:</div> <div>384888, Pacific Northwest National Laboratory</div> <div>Pacific Northwest National Lab, SA, 57671</div> </div> </div>									
<div> <div>UPMDG1AC-SAMP Constituent List:</div> <div> <div>Tc-99</div> <div>RDL:1.50E+01</div> <div>pCi/L</div> <div>LCL:70</div> <div>UCL:130</div> <div>RPD:20</div> </div> </div>									
<div> <div>JPNH21AA-BLK:</div> <div> <div>Tc-99</div> <div>RDL:1.50E+01</div> <div>pCi/L</div> <div>LCL:</div> <div>UCL:</div> <div>RPD:</div> </div> </div>									
<div> <div>JPNH21AC-LCS:</div> <div> <div>Tc-99</div> <div>RDL:15</div> <div>pCi/L</div> <div>LCL:70</div> <div>UCL:130</div> <div>RPD:20</div> </div> </div>									
<div> <div>JPNH21AD-IBLK:</div> <div> <div>Tc-99</div> <div>RDL:1.50E+01</div> <div>pCi/L</div> <div>LCL:</div> <div>UCL:</div> <div>RPD:</div> </div> </div>									
<div> <div>UPMDG1AC-SAMP Calc Info:</div> <div> <div>Uncert Level (#s): 2</div> <div>Decay to SaDt: Y</div> <div>Blk Subt.: N</div> <div>Sci.Not.: Y</div> <div>ODRs: B</div> </div> </div>									
<div> <div>JPNH21AA-BLK:</div> <div> <div>Uncert Level (#s): 2</div> <div>Decay to SaDt: Y</div> <div>Blk Subt.: N</div> <div>Sci.Not.: Y</div> <div>ODRs: B</div> </div> </div>									
<div> <div>JPNH21AC-LCS:</div> <div> <div>Uncert Level (#s): 2</div> <div>Decay to SaDt: Y</div> <div>Blk Subt.: N</div> <div>Sci.Not.: Y</div> <div>ODRs: B</div> </div> </div>									
<div> <div>JPNH21AD-IBLK:</div> <div> <div>Uncert Level (#s): 2</div> <div>Decay to SaDt: Y</div> <div>Blk Subt.: N</div> <div>Sci.Not.: Y</div> <div>ODRs: B</div> </div> </div>									
<div> <div>Approved By</div> <div>Date:</div> </div>									
<div> <div>STL Richland</div> <div>Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2</div> <div>Page 2</div> </div>									
<div> <div>Richland Wa.</div> <div>pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added</div> <div>ISV - Insufficient Volume for Analysis</div> <div>WO Cnt: 8</div> <div>Prep_SamplePrep v4.8.26</div> </div>									

2/19/2007 2:29:13 PM

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

Sample Preparation/Analysis

AR H-3 Prp/SepRC5007
S6 Tritium by Liquid Scint
5I CLIENT: HANFORD

Balance Id: 13445

Pipet #:

AnalyDueDate: 03/26/2007

Sep1 DT/Tm Tech: 3-9-07

Batch: 7050417 WATER

PM, Quote: SA, 57671

Sep2 DT/Tm Tech:

SEQ Batch, Test: None

pCi/L

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
8 JPHGJ-1-AA								
J7B150278-1-SAMP								
02/14/2007 10:50								
9 JPMDH-1-AA								
J7B180101-2-SAMP								
02/15/2007 12:05								
10 JPMDJ-1-AA								
J7B180101-3-SAMP								
02/15/2007 11:26								
11 JPNH5-1-AA-B								
J7B190000-417-BLK								
02/12/2007 12:39								
12 JPNH5-1-AC-C								
J7B190000-417-LCS								
02/12/2007 12:39								
13 JPNH5-1-AD-BX								
J7B190000-417-MBLK								
02/12/2007 12:39								
14 JPNH5-1-AE-CM								
J7B190000-417-MLCS								
02/12/2007 12:39								

STL Richland Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2 Page 2 WO Cnt: 14
 Richland Wa. pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added ISV - Insufficient Volume for Analysis ICOC v4.8.26

2/19/2007 2:29:19 PM

Sample Preparation/Analysis

Balance Id:

12445

AR H-3 Prp/SepRC5007

Pipet #:

S6 Tritium by Liquid Scint

AnalyseDueDate: 03/26/2007

5/ CLIENT: HANFORD

Sep1 DT/Tm Tech:

3-9-07

Batch: 7050417
SEQ Batch, Test: None

pCi/L

Sep2 DT/Tm Tech:

Work Order, Lot, Sample Date/Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
--------------------------------------	-------------------	-----------------------------	------------------------	-------------------	----------------	---------------------------------	--------------------------	-----------

15 JPNH5-1-AF-BN

J7B190000-417-IBLK

02/12/2007 12:39

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

16 JPNH5-1-AG-BN

J7B190000-417-IBLK

02/12/2007 12:39

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

17 JPNH5-1-AH-BN

J7B190000-417-IBLK

02/12/2007 12:39

AmtRec:

#Containers: 1

Scr:

Alpha:

Beta:

Comments:

All Clients for Batch:

384868, Pacific Northwest National Laboratory

Pacific Northwest National Lab, SA, 57671

JPAPR1AA-SAMP Constituent List:

H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JPNH51AA-BLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JPNH51AC-LCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JPNH51AD-MBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JPNH51AE-MLCS:					
H-3	RDL:400	pCi/L	LCL:70	UCL:130	RPD:20
JPNH51AF-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:
JPNH51AG-IBLK:					
H-3	RDL:400	pCi/L	LCL:	UCL:	RPD:

STL Richland

Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2

ISV - Insufficient Volume for Analysis

WO Cnt: 17

Richland Wa.

pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktailed Added

ICOC v4.8.26

2/19/2007 2:29:24 PM

Sample Preparation/Analysis

Balance Id:

AR H-3 Prp/SepRC5007

Pipet #:

S6 Tritium by Liquid Scint

SI CLIENT: HANFORD

Sep1 DT/Tm Tech:

Sep2 DT/Tm Tech:

Analysis Due Date: 03/26/2007

Batch: 7050417

SEQ Batch, Test: None

pCi/L

Prep Tech:

Work Order, Lot, Sample Date/Time	Total Amt/Unit	pCi/L	LCL:	UCL:	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
JPNH51AH-IBLK:										
H-3	RDL:400				REF:					
UTAPR1AA-SAMP Calc Info:										
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B		
JPNH51AA-BLK:										
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B		
JPNH51AC-LCS:										
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B		
JPNH51AD-MBLK:										
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B		
JPNH51AE-MLCS:										
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B		
JPNH51AF-IBLK:										
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B		
JPNH51AG-IBLK:										
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B		
JPNH51AH-IBLK:										
Uncert Level (#s): 2		Decay to SaDt: Y		Blk Subt.: N		Sci.Not.: Y		ODRs: B		

Approved BY

Date:

Sample Preparation/Analysis

Balance Id:1120482733

3/2/2007 12:23:10 PM

DH UNat_Laser PrpRC5015
SS Total Uranium by KPA
SI CLIENT: HANFORD

384868, Pacific Northwest National Laboratory
Pacific Northwest National Lab

Pipet #:

Sep1 DT/Tm Tech:

PM, Quote: SA , 57671

Batch: 7050402 WATER ug/L

Sep2 DT/Tm Tech:

Prep Tech: ,BockJ / APA

Work Order, Lot, Sample Date Time	Total Amt/Unit	Initial Aliquot Amt/Unit	QC Tracer Prep Date	Count Time Min	Detector Id	Count On Off (24hr) Circle	CR Analyst, Init/Date	Comments:
1 JPAPP-1-AD		27.10g.in						
J7B120175-1-SAMP								
02/09/2007 08:27								
2 JPAPP-1-AE-X		25.20g.in						
J7B120175-1-DUP								
02/09/2007 08:27								
3 JPDMW-1-AF		25.20g.in						
J7B130298-3-SAMP								
02/12/2007 11:36								
4 JPDMW-1-AG-S		25.40g.in						
J7B130298-3-MS								
02/12/2007 11:36								
5 JPDM3-1-AF		24.90g.in						
J7B130298-4-SAMP								
02/12/2007 11:36								
6 JPHGJ-1-AF		25.00g.in						
J7B150278-1-SAMP								
02/14/2007 10:50								
7 JPMDH-1-AD		25.90g.in						
J7B180101-2-SAMP								
02/15/2007 12:05								
STL Richland	Key: In - Initial Amt, fi - Final Amt, di - Diluted Amt, s1 - Sep1, s2 - Sep2	Page 1	Page 1	Page 1	Page 1	Page 1	Page 1	Page 1
Richland Wa.	pd - Prep Dt, r - Reference Dt, ec-Enrichment Cell, ct-Cocktalled Added	ISV - Insufficient Volume for Analysis	WO Cnt: 7	Prep_SamplePrep v4.8.26				

3/8/2007 7:48:02 AM

ICOC Fraction Transfer/Status Report

ByDate: 3/8/2006, 3/13/2007, Batch: '7050422', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7050422				
AC	CalcC	BockJ	3/1/2007 11:58:36	
SC		wagarr	IsBatched	2/19/2007 2:31:07 PM
SC		BockJ	InPrep	3/1/2007 11:58:36 AM
SC		BockJ	Prep1C	3/1/2007 1:55:44 PM
SC		FABREM	Sep1C	3/6/2007 10:55:41 AM
SC		FABREM	Sep2C	3/6/2007 4:55:53 PM
SC		DAWKINSO	InCnt1	3/6/2007 5:25:28 PM
SC		BlackCL	CalcC	3/7/2007 9:23:01 AM
AC		BockJ	3/1/2007 1:55:44 PM	ICOC_RADCALC v4.8.26
AC		FABREM	3/6/2007 10:55:41	rich-rc-5016 rEVISION 6
AC		FABREM	3/6/2007 4:55:53 PM	RICH-RC-5016 REVISION 6
AC		DAWKINSO	3/6/2007 5:25:28 PM	RICH-RC-5010 REVISION 4
AC		BlackCL	3/7/2007 9:23:01 AM	RICH-RC-5039 REV 5
				RICH-RD-0008 REVISION 4
				RICH-RD-0008 REVISION 4

AC: Accepting Entry, SC: Status Change

STL Richland

Richland Wa.

Page 1

Grp Rec Cnt:6

ICOCFractions v4.8.26

STL RICHLAND

133

3/27/2007 10:19:29 AM

ICOC Fraction Transfer/Status Report

ByDate: 3/27/2006, 4/1/2007, Batch: '7050428', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7050428				
AC	CalcC	BockJ	3/6/2007 11:23:59	
SC		wagarr	IsBatched 2/19/2007 2:31:07 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 3/6/2007 11:23:59 AM	RICH-RC-5014 Revision 6
SC		BockJ	Prep1C 3/6/2007 2:08:30 PM	RICH-RC-5014 REVISION 6
SC		AshworthA	InPrep2 3/21/2007 11:49:53 AM	RICH-RC-5014 REVISION 6
SC		HARBINSOND	Prep1C 3/23/2007 3:44:08 PM	RICHRC5014 REV6
SC		DAWKINSO	InCnt1 3/23/2007 6:15:57 PM	RICH-RD-0003 REVISION 4
SC		DAWKINSO	CalcC 3/23/2007 9:05:30 PM	RICH-RD-0003 REVISION 4
AC		BockJ	3/6/2007 2:08:30 PM	
AC		AshworthA	3/21/2007 11:49:53	
AC		HARBINSOND	3/23/2007 3:44:08 PM	
AC		DAWKINSO	3/23/2007 6:15:57 PM	
AC		DAWKINSO	3/23/2007 9:05:30 PM	

AC: Accepting Entry; SC: Status Change

STL Richland

Richland Wa.

Page 1

Grp Rec Cnt:6

ICOCFractions v4.8.26

STL RICHLAND

134

3/27/2007 3:44:06 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/27/2006, 4/1/2007, Batch: '7050430', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7050430				
AC	CalcC	BockJ	3/6/2007 10:01:39	
SC		wagarr	IsBatched 2/19/2007 2:31:07 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 3/6/2007 10:01:39 AM	RICH-RC-5014 Revision 6
SC		BockJ	Prep1C 3/6/2007 10:23:29 AM	RICH-RC-5014 REVISION 6
SC		HARBINSOND	Prep1C 3/23/2007 3:43:03 PM	RICHRC5014 REV6
SC		DAWKINSO	InCnt1 3/23/2007 6:47:29 PM	RICH-RD-0003 REVISION 4
SC		DAWKINSO	CalcC 3/23/2007 9:05:24 PM	RICH-RD-0003 REVISION 4
SC		BlackCL	InCnt1 3/27/2007 10:55:00 AM	RICH-RD-0003 REVISION 4
SC		BlackCL	CalcC 3/27/2007 12:43:03 PM	RICH-RD-0003 REVISION 4
AC		BockJ	3/6/2007 10:23:29	
AC		HARBINSOND	3/23/2007 3:43:03 PM	
AC		DAWKINSO	3/23/2007 6:47:29 PM	
AC		DAWKINSO	3/23/2007 9:05:24 PM	
AC		BlackCL	3/27/2007 10:55:00	
AC		BlackCL	3/27/2007 12:43:03	

AC: Accepting Entry; SC: Status Change

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3/14/2007 8:13:43 AM

ICOC Fraction Transfer/Status Report

ByDate: 3/14/2006, 3/19/2007, Batch: '7050426', User: 'ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7050426				
AC	CalcC	BockJ	3/1/2007 9:49:23 AM	
SC		wagarr	IsBatched 2/19/2007 2:31:07 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 3/1/2007 9:49:23 AM	rich-rc-5016 rEVISION 6
SC		BockJ	Prep1C 3/1/2007 9:57:38 AM	RICH-RC-5016 REVISION 6
SC		ManisD	InSep1 3/1/2007 2:46:08 PM	RICH-RC-5006 REV 6
SC		ManisD	Sep1C 3/2/2007 1:42:32 PM	RICH-RC-5006 REV 6
SC		StringerR	InCnt1 3/2/2007 1:58:57 PM	RICH-RD-0007 REVISION 5
SC		DAWKINSO	Cnt1C 3/2/2007 7:49:20 PM	RICH-RD-0007 REVISION 5
SC		ManisD	InSep2 3/9/2007 9:03:44 AM	RICH-RC-5071 REV 4
SC		ManisD	Sep2C 3/9/2007 1:53:24 PM	RICH-RC-5071 REV 4
SC		StringerR	InCnt1 3/9/2007 1:58:05 PM	RICH-RD-0003 REVISION 4
SC		StringerR	CalcC 3/11/2007 10:42:53 AM	RICH-RD-0003 REVISION 4
AC		BockJ	3/1/2007 9:57:38 AM	
AC		ManisD	3/1/2007 2:46:08 PM	
AC		ManisD	3/2/2007 1:42:32 PM	
AC		StringerR	3/2/2007 1:58:57 PM	
AC		DAWKINSO	3/2/2007 7:49:20 PM	
AC		ManisD	3/9/2007 9:03:44 AM	
AC		ManisD	3/9/2007 1:53:24 PM	
AC		StringerR	3/9/2007 1:58:05 PM	
AC		StringerR	3/11/2007 10:42:53	

AC: Accepting Entry; SC: Status Change

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3/19/2007 3:35:15 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/19/2006, 3/24/2007, Batch: '7050420', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7050420				
AC	CalcC	BockJ	3/1/2007 1:16:11 PM	
SC		wagarr	IsBatched 2/19/2007 2:31:07 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 3/1/2007 1:16:11 PM	RICH-RC-5016 Revision 6
SC		BockJ	Prep1C 3/2/2007 8:03:09 AM	RICH-RC-5017 REVISION 5
SC		AshworthA	InPrep2 3/13/2007 9:57:57 AM	RICH-RC-5017 REVISION 4
SC		AshworthA	Prep2C 3/15/2007 11:14:27 AM	RICH-RC-5017 REVISION 4
SC		BlackCL	InCnt1 3/15/2007 11:45:43 AM	RICH-RD-0007 REVISION 5
SC		DAWKINSO	CalcC 3/15/2007 6:29:35 PM	RICH-RD-0007 REVISION 5
AC		BockJ	3/2/2007 8:03:09 AM	
AC		AshworthA	3/13/2007 9:57:57	
AC		AshworthA	3/15/2007 11:14:27	
AC		BlackCL	3/15/2007 11:45:43	
AC		DAWKINSO	3/15/2007 6:29:35 PM	

AC: Accepting Entry; SC: Status Change

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3/19/2007 1:47:33 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/19/2006, 3/24/2007, Batch: '7050424', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7050424				
AC	CalcC	BockJ	3/8/2007 9:49:28 AM	
SC		wagarr	IsBatched 2/19/2007 2:31:07 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 3/8/2007 9:49:28 AM	rich-rc-5014 rEVISION 6
SC		BockJ	Prep1C 3/8/2007 10:11:08 AM	RICH-RC-5017 REVISION 5
SC		BostedD	InPrep2 3/12/2007 12:42:42 PM	RICHRC5025 REV3
SC		BostedD	Prep2C 3/13/2007 1:24:45 PM	RICHRC5025 REV3
SC		BlackCL	InCnt1 3/13/2007 1:53:25 PM	RICH-RD-0007 REVISION 5
SC		DAWKINSO	CalcC 3/13/2007 8:22:44 PM	RICH-RD-0007 REVISION 5
AC		BockJ	3/8/2007 10:11:08	
AC		BostedD	3/12/2007 12:42:42	
AC		BostedD	3/13/2007 1:24:45 PM	
AC		BlackCL	3/13/2007 1:53:25 PM	
AC		DAWKINSO	3/13/2007 8:22:44 PM	

AC: Accepting Entry; SC: Status Change

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3/5/2007 3:39 04 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/5/2006, 3/10/2007, Batch: '7050408', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7050408				
AC	CalcC	BockJ	3/1/2007 12:21:31 PM	
SC		wagarr	IsBatched 2/19/2007 2:31:07 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 3/1/2007 12:21:31 PM	RICH-RC-5016 Revision 6
SC		BockJ	Prep1C 3/1/2007 12:31:36 PM	RICH-RC-5016 REVISION 6
SC		FABREM	Sep1C 3/2/2007 3:03:10 PM	RICH-RC-5078 REVISION 3
SC		DAWKINSO	InCnt1 3/2/2007 3:21:27 PM	RICH-RD-0001 REVISION 3
SC		StringerR	CalcC 3/4/2007 11:38:11 AM	RICH-RD-0001 REVISION 3
AC		BockJ	3/1/2007 12:21:36 PM	
AC		FABREM	3/2/2007 3:03:10 PM	
AC		DAWKINSO	3/2/2007 3:21:27 PM	
AC		StringerR	3/4/2007 11:38:11	

AC: Accepting Entry; SC: Status Change

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3/9/2007 11:20:04 AM

ICOC Fraction Transfer/Status Report

ByDate: 3/9/2006, 3/14/2007, Batch: '7050405', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7050405				
AC	CalcC	BockJ	3/1/2007 12:35:16 PM	
SC		wagarr	IsBatched 2/19/2007 2:31:07 PM	ICOC_RADCALC v4.8.26
SC		BockJ	InPrep 3/1/2007 12:35:16 PM	RICH-RC-5016 Revision 6
SC		BockJ	Prep1C 3/1/2007 12:43:52 PM	RICH-RC-5016 REVISION 6
SC		FABREM	Sep1C 3/7/2007 9:06:38 AM	RICH-RC-5078 REVISION 3
SC		StringerR	InCnt1 3/7/2007 9:12:13 AM	RICH-RD-0001 REVISION 3
SC		BlackCL	CalcC 3/8/2007 6:37:37 AM	RICH-RD-0001 REVISION 3
AC		BockJ	3/1/2007 12:43:52 PM	
AC		FABREM	3/7/2007 9:06:38 AM	
AC		StringerR	3/7/2007 9:12:13 AM	
AC		BlackCL	3/8/2007 6:37:37 AM	

AC: Accepting Entry; SC: Status Change

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3/14/2007 1:00:41 PM

ICOC Fraction Transfer/Status Report

ByDate: 3/14/2006, 3/19/2007, Batch: '7050417', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7050417				
AC	CalcC	McDowellID	3/8/2007 11:09:54	
SC		wagarr	IsBatched 2/19/2007 2:31:07 PM	ICOC_RADCALC v4.8.26
SC		McDowellID	InSep1 3/8/2007 11:09:54 AM	RICH-RC-5007 REVISION 6
SC		McDowellID	Sep1C 3/12/2007 3:22:35 PM	RICH-RC-5007 REVISION 6
SC		DAWKINSO	InCnt1 3/12/2007 5:11:46 PM	RICH-RD-0001 REVISION 3
SC		BlackCL	CalcC 3/14/2007 6:35:25 AM	RICH-RD-0001 REVISION 3
AC		McDowellID	3/12/2007 3:22:35 PM	
AC		DAWKINSO	3/12/2007 5:11:46 PM	
AC		BlackCL	3/14/2007 6:35:25	

AC: Accepting Entry; SC: Status Change

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STL RICHLAND

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3/21/2007 9:23:48 AM

ICOC Fraction Transfer/Status Report

ByDate: 3/21/2006, 3/26/2007, Batch: '7050402', User: *ALL Order By DateTimeAccepting

Q Batch	Work Ord	CurStatus	Accepting	Comments
7050402				
AC		Cnt1C	BockJ	3/2/2007 12:16:19 PM
SC			wagarr	IsBatched 2/19/2007 2:31:07 PM
SC			BockJ	InPrep 3/2/2007 12:16:19 PM
SC			BockJ	Prep1C 3/2/2007 12:25:14 PM
SC			AshworthA	InPrep2 3/13/2007 9:53:47 AM
SC			AshworthA	Prep2C 3/15/2007 11:14:36 AM
SC			NelsonT	Cnt1C 3/20/2007 3:54:31 PM
AC			BockJ	3/2/2007 12:25:14 PM
AC			AshworthA	3/13/2007 9:53:47
AC			AshworthA	3/15/2007 11:14:36
AC			NelsonT	3/20/2007 3:54:31 PM

AC: Accepting Entry; SC: Status Change

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